UNIVERSITY OF LONDON

UNIVERSITY COLLEGE ANNUAL REPORT 1970-1971

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OFFICERS OF THE COLLEGE

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THE RIGHT HON. LORD STRANG

G.C.B., G.C.M.G., M.B.E., B.A., LL.D.

VICE-CHAIRMAN OF THE COLLEGE COMMITTEE

SIR BERNARD WALEY-COHEN, BT, LL.D., M.A.

TREASURER

SIR JOHN STEVENS

K.C.M.G., O.B.E., D.S.O., T.D.

PROVOST

THE RIGHT HON. LORD ANNAN

O.B.E., M.A., D.LITT., D.U.

VICE-PROVOST

PROFESSOR SIR HARRIE MASSEY

D.SC., PH.D., LL.D., F.R.S.

SECRETARY

A. TATTERSALL, M.A.

FOREWORD BY THE PROVOST

Universities have learned during the past decade that they are in politics—that they are part of the governmental system which is run from Whitehall under the formal control of Westminster. Their procedure for admitting students, their teaching, the salaries of their academic staff, their relation to the other parts of the system of education for those over the age of sixteen have all been examined, and are now kept under the microscope. Cost per student, in cash and square feet, is the factor which is now uppermost in the mind of Government.

As this quinquennium ends, the inquisition has moved remorselessly forward. The financing of the Research Councils and of the student unions are now both under scrutiny and the subject of Government Green Papers.

British universities face an unpleasant dilemma. In many ways they are singularly favoured. They are remarkably free from detailed governmental control. Their staff have time for their own research, and by getting tenure early have security in their profession. Compared with those of any other country, the staff-student ratios are very favourable, the staff benefit: so do the students. Undergraduates, as well as graduates, get personal tuition and attention, and very few fail to get a degree. Until recently students have been adequately, and also equitably, financed. By European standards they have ample facilities.

But as the expansion of higher education has proceeded, Government has begun to count the cost. The decision to found thirty polytechnics—and to found most of them in the same geographical areas as the universities—has produced a major conflict for funds and amenities. The superb buildings of our own neighbour, the Central London Polytechnic in Marylebone Road and in New Cavendish Street, do not produce envy so much as the realisation that the polytechnics are on the way to substantiating their claim to be treated on an equal footing with the universities, and to be given the same degree of financial support. And this means inevitably that there will be far less money for universities, more competition for lodgings for students, and even stricter application of University Grants Committee norms for buildings and resources.

As a result every change for British universities these days is, for those who work in them, a change for the worse. Nothing could better illustrate this than the difficulty we are finding in our plans to implement the proposals of the Todd Report for Medical Education in

London. Under that scheme all pre-clinical medical teaching was to have been undertaken by the College for the Medical Schools of University College Hospital and of the Royal Free Hospital, leading to an increase of some hundred medical students a year in the intake to our Faculty. But our four pre-clinical departments are not just departments for teaching medical students. They also teach undergraduates doing a full three-years degree in the biological sciences, as well as over a hundred graduate students. Within these departments are numbers of research units heavily supported by outside funds. The additional staff to teach the hundred or so extra students will require additional space: they should not be treated as poor relations working with markedly lower resources than their colleagues. But, so far, our estimates of what we shall need in additional space are astronomically out of line with what the UGC permits as norms for laboratory space. A great effort to break the log-jam is being made by the present Vice-Chancellor, who, as a distinguished physician, can bring special skills to bear on the problem—and needs them all, in that other colleges and medical schools are also facing comparable problems.

The year 1970–71 will go down as the year of inflation. It continued at a fiercer rate than ever before. Inflation is meant to be dealt with in quinquennial finance by the device of supplementary grants intended to compensate for the fall in the value of money. Such grants are always paid after the events which give rise to them, and because the rate of inflation was so steep, our situation was that much worse. The Library has been especially hard pressed, hit by devaluation as well as by inflation. The price of books has risen by 20 per cent, of periodicals by 15 per cent, and of binding by 12½ per cent. Although early in the quinquennium it was agreed to increase the Library grant annually until in the last year it is £20,000 a year greater than in 1967, and although extra cash allocations totalling £35,000 have been made, the Library is still inadequately provided for.

Nevertheless, when the outlook was at its most gloomy relief came. Faced with the fact that all universities were almost certain to enter the next quinquennium in the red—an unprecedented occurrence in university finance—the Chairman of the UGC beat upon the door of the Treasury and argued the case with such vigour that the universities have received or will get £26·9 m. in supplementary grants in 1970–72. When our share came from the Court we were able to allocate funds in a way which we had given up hope of doing.

Since we had to pay out of our block grant the increases in salaries and wages of our technicians and most of our non-teaching staff, we

had so few funds left for the running expenses of departments that they were going into deficit. The first priority therefore was to build up departmental grants, the second to give first-aid to the Library, the third to create some new posts which had been stuck in the pipeline for a long time. We can now say that most of the ventures started at the beginning of this decade and in the post-Robbins period have got off the ground, and subjects such as Spanish and Linguistics are securely established even if their intake and staff are small. We have also taken a risk and accepted a new commitment. There has been very strong support from the scientific and technological departments for the introduction of the teaching of computer science. Two years ago, IBM offered us the cost of a Chair for seven years, but at that time we were not in a position to accept new commitments and in any case there was considerable difference of opinion about the level of support, both of staff and in recurrent grant, needed to introduce this new option. The IBM grant has now been accepted and some £8,000 in recurrent grant has been put aside to support this development.

We were able to make these dispositions because we had scrutinised severely all posts that fell vacant. This scrutiny resulted in a saving of £20,000 in recurrent money, and although we certainly cannot expect to get savings of that order in the next quinquennium, it is clearly extremely important to keep the scrutiny going.

It is in fact staggering what we have achieved. The equivalent of 20 or more new posts have been created. 89 senior promotions have been made. Massive take-overs of £119,000, involving 20 academic and 32 technical staff, were effected by the UGC assuming responsibility for former earmarked Research Council grants, and from our own block grant we took over expenditure which had hitherto been financed by benefactors of £6,900 for Spanish, £1,500 for Linguistics, and £1,500 for the great edition of Bentham's works. Expenditure on Environmental Studies was boosted by £20,000 in the last year of the quinquennium. Over £3½ m. of new buildings have been created or purchased, which cost over £100,000 to maintain.

There is, however, one inevitable regret. Quinquennial planning has virtually died. It becomes impossible to honour promises and implement plans which have often taken months to hammer out, when in one year economies have to be imposed on departments, vacancies frozen and establishments reduced, and in the next the cuts can be restored. A 'quinquennium' now lasts three years. For the first year an interim grant is fixed and it is only during that year that the grant for the whole quinquennium becomes known: in the last

year no new commitments can be undertaken for fear of prejudging the next quinquennium. The level of grant in the first year of the new quinquennium is reasonable and the College will now have to begin working out priorities. First we shall have to consider the take-over of grants which expire at the end of 1971–72. High up on the list too are certain supporting posts: no institution can continue to increase student numbers and expect the same number of technical and administrative staff to meet their needs. It is also inevitable that those departments which are able to increase student numbers at the lowest marginal cost are likely to have the best chance of obtaining extra staff.

There is another anxiety. University College has received over the years a quite exceptional degree of support from the Research Councils. We do not doubt that, whatever pattern of research support Government decides upon, we will continue to benefit in this way; but under new arrangements either the amount could diminish or the emphasis shift in a way that might affect staffing arrangements and, indeed, the direction of research.

The Financing of Student Unions

The much publicised reasons for the Government examining the finances of student unions were the misuse of funds by a very few university unions who made donations to political or charitable causes, and the illiberal action of no more than two unions in cutting off funds from the student branch of a Conservative club. If these were the only reasons the matter could have been dealt with by the universities themselves, in their usual slow and unemphatic way, if necessary through appeal to the courts of law.

But there was another reason which was beyond the control of the universities. The present system presents the local authorities with an open-ended commitment. The fees for union membership, which differ widely from university to university, are raised unilaterally by the universities as and when they deem it necessary. No one suggests that there has been gross extravagance or scandalous rises in fees, but in these days when the local authorities are financed through a block grant, they cannot accept a system which renders them liable to pay increased fees fixed by others. So not for the first time Government in the process of altering financial arrangements has taken the opportunity to propose far-reaching changes in the way universities live and have their being.

In order to placate the local authorities and to safeguard against the misuse of union funds, the Green Paper recommends that student

unions should be financed through the UGC block grant. This proposal has the consequence of putting union finance in direct competition with finance for teaching and research, and of making the union accounts, like those of the university itself, open to scrutiny by the Auditor-General. That is why the Green Paper goes on to suggest that in addition to a block UGC grant some small amount might continue to be paid to students by the local authorities to support their cultural and political clubs, which would then be ineligible for any financial support from union funds, and become purely voluntary activities, but would be free to spend the subscriptions paid by students in any way they wanted.

These proposals were unacceptable not only to the National Union of Students and student unions generally, including our own, but to the Vice-Chancellors Committee, the Directors of the Polytechnics, and other interested bodies. In the face of their arguments the Government has now acknowledged that no change in arrangements can take place this year, and it looks as if these precise proposals will not be forced upon us.

There has been support in the House of Commons for appointing a Registrar, but the notion seems to be based on a misapprehension. Student unions have a great measure of independence in the management of their affairs and it is right that they should. An external officer would be unable to act in day to day matters or, if he tried to do so, would be regarded as an intruder. If he did not, his sole sanction would be to deregister a union and render it incapable of receiving public funds. If what the Government requires are guide lines which should spell out, more than at present, what areas of expenditure are legitimate, and how each union is to be made accountable, the universities themselves and other institutions of higher education are the proper bodies to do this in conjunction with the Department of Education and Science.

Here again is an instance where any change inevitably appears to the universities to be a change for the worse. Both College and Union are worried that a national system will be introduced which will give our students facilities and funds inferior to what they have had in the past, and that the College will be powerless to remedy the situation. This could easily happen if the split fee principle was accepted or if an earmarked grant for the Union was introduced. The negotiations with Government in the immediate future should prove lively.

The Government of the College

One major change has taken place in the governance of the

College. The Professorial Board now numbers over 170. It is still an admirable sounding board for opinion and a place at which wise speeches are often made. But it has for some time been obvious to its members that it can no longer satisfactorily operate as a deliberative body. In debates it is difficult to discover whether a consensus exists, and therefore some debates on highly complex business have necessarily been inconclusive.

As a result the Professorial Board agreed to set up an Executive Committee with certain powers to act on its behalf. This body numbers 22 and is composed solely of members of the Board. Of the 14 elected members, 6 are non-professorial. Although minor matters will be handled by this Committee and reported to the Professorial Board, the Professorial Board will have the opportunity of discussing all major issues and indeed of referring them back to the Executive Committee if they think they are on the wrong lines.

Furthermore, in the future, appointment to the Headship of a Department will no longer be a life sentence. The new arrangement is that a Head of Department will be appointed for an initial five-year period; thereafter he may be renewed in the office if he and the College both wish it, for periods of five years usually to retiring age: but either he or the College is free to give notice. This step will not greatly affect many Heads of Departments, but it will be a relief to distinguished scholars who take up the Headship of a Department out of a sense of duty to know that the gates of the administrative prison-house have not irrevocably closed upon them.

Much thought has been given during the year to the application of statistical procedures to the allocation of resources within the College. Various committees have reported on the use of formulae in relating student load to teaching staff, in considering technical staff requirements in departments, and in the allocation of recurrent grants to meet departmental running expenses. The principle of providing such information as an aid to decision-making was accepted, but it was also recognised that other factors would always have to be taken into account. In most universities it is possible, and indeed acceptable, to allocate funds between the different faculties and departments according to a strict formula based on student numbers. But at University College allowance has to be made for numbers of other factors, particularly the degree of research support and the size and number of projects taken over in the past; and it has always been the wish of the College to take into account the known excellence of certain activities when allocating funds. As a result our planning has to acquire a high degree of sophistication; and it has yet to acquire it.

One of the ways of grappling with this problem has been to set up a committee under Professor Lindley to provide and present statistics concerning the College's activities.

January 1972 ANNAN, *Provost*

THE REPORT FOR 1970–71

At the end of the session Lord Strang retired from the office of Chairman of the College Committee. He joined the Committee in 1955, a short time after his retirement from the Foreign Office, and was elected to the chairmanship, in succession to Lord Cohen, in 1963.

Lord Strang has been a very special Chairman. He was in no sense a figurehead. His wide comprehension of our affairs, his alertness of mind and his attention to crucial detail have been invaluable to the College. He never attempted to rule: he saw himself as one who was there to advise, encourage and warn—and mainly to encourage. His capacity to understand and sympathise with the problems of the staff and students of to-day, and to be accepted by them, has been the more remarkable when the times in which he served as Chairman have been so vastly different from his own days as a student of the College.

The College owes him a further debt. Quite beyond the call of duty he has attended numerous festivities, academic occasions, and student society meetings; he has played his part in Foundation Week and Freshers' Week, being always willing to speak at functions; and each year he has entertained the President of the Union and some of his colleagues in the House of Lords. Such generosity of spirit is not forgotten; and the gratitude of the College to him and to Lady Strang for all that they have brought in kindliness, friendship and solicitude cannot be adequately expressed. He remains a Fellow of the College, and it is hoped that he will long continue to grace our functions with his presence.

At a dinner, with Lady Strang, attended by some of his older friends in the College and those with whom in recent years he has worked most intimately, Lord Strang was presented with a portrait of himself in his Doctor's robes painted by Oliver Campion, the gift of the College and the Friends of University College. Characteristically, he at once gave it to the College and it now hangs in the Old Refectory.

In succession to Lord Strang, the College Committee has nominated as its Chairman for the session 1971–72 Sir Bernard Waley-Cohen, who was Vice-Chairman in 1970, and has served as Treasurer of the College from 1962 to 1970. To the office of Vice-Chairman the College Committee has elected Sir Edward Playfair.

Finance

The income of University College for 1970–71 amounted to £8,053,963, an increase of £934,430 over 1969–70. Expenditure in 1970–71 was £8,077,232, inclusive of the cost of research borne by outside grants, which totalled £1,527,151 compared with £1,282,623 in 1969–70. The number of these grants reached 457, an increase of 34.

Capital grants announced for the year amounted to £147,816, compared with £317,753 for the previous year. Receipts against these and previous capital grants and capital expenditure amounted to £336,153, compared with £348,228 in 1969–70.

The finances of the College were subjected to strain during the financial year by the need to provide liquid resources to complete the purchase of the Endsleigh Hotel (see page 13), and recourse to short-term borrowing was necessary. The situation was relieved to a considerable extent by an interest-free loan from the Court of the University, for which the College was most grateful.

Student Numbers

The total student population rose to 5,362, but there was a decrease in the number of full-time students from 4,429 to 4,377, with a corresponding increase in the number of part-time students. The student load, calculated for the UGC, in terms of full-time equivalent students, rose from 4,965 to 5,008.

The number of undergraduate students reached a new record of 3,655, but there was again a fall in the number of postgraduate students, from 1,760 to 1,707. The number of overseas students continued to increase and stood at 914 as against 892 in 1969–70.

The percentage of full-time students living in halls of residence or other accommodation provided by the College or the University rose from 30·8 in 1969–70 to 35·5, and there was a corresponding reduction to 40·2 in the percentage of students living in lodgings.

Building Programme

Ifor Evans Hall and Max Rayne House, on the Whitcher Place site at Camden Town, where more than five hundred students of the College have been brought together in a single residential community,

were formally opened on 4 November 1970. Lord Evans, who had done so much to bring about this development, declared the halls open with a penetrating and witty speech, and the Provost expressed the thanks of the College to Sir Max Rayne, to Sir Harold Samuel, and to the Anonymous Donor, for their generous benefactions, which had made the project possible.

The erection of the extension to Ramsay Hall was completed in May 1971 and was furnished ready for occupation by 195 men students at the beginning of the session 1971–72. The building costs were met by the third of the Anonymous Donor's generous donations to the College for the building of halls of residence.

These developments have provided an outstanding accession of residential facilities for our students; we now have nearly four times as many students 'living in' as we had ten years ago.

The construction of the new Student Health Centre on the Gower Place frontage is proceeding. This building, which should be completed in the summer of 1972, is financed by a benefaction from the Wolfson Trust.

The College has purchased the old Endsleigh Hotel, the site of which has frontages to Gordon Street, Endsleigh Gardens, and Taviton Street. It is intended to recoup the purchase price from the proceeds of the sales of Flaxman House and 171–4 Tottenham Court Road. The old hotel has been demolished and a new building is being designed by Anthony Cox. When completed it will enable the activities of the School of Environmental Studies, which at present are accommodated in several locations within and outside the rectangle, to take place under one roof. The major part of the cost of erecting the new building will be met by a munificent benefaction of £450,000 from the Wates Foundation, one of the largest gifts ever made to the College.

Work is taking place in the Department of Zoology and Comparative Anatomy to provide a new animal house on the roof of the Zoology Building and to modernise some of the laboratory space on the first floor. The cost of this building work is being met mainly by donations from the Imperial Cancer Research Fund, the Wellcome Trust, and the Max Rayne Foundation.

The Medical Research Council is carrying out building alterations and the installation of specialist services on the ground floor and in the basement at the south end of Foster Court and in the basement of 4 Malet Place, to provide accommodation for their Unit for Neural Mechanisms of Behaviour which is based in the Department of Psychology.

The first students were admitted in 1970–71 to the new B.A. degree course in French for students of University College, and the last to the course for the Diploma in Educational Psychology, which in 1971–72 becomes a course for the M.Sc. degree. The University instituted in 1969–70 regulations for a new Diploma in International Law and the first candidates for this specialist qualification will enter the College in 1971–72.

The sub-committee of the Professorial Board set up in 1968 to review the system of examinations in the College produced its second report. This set out the present examination structure, drew attention to the number of alternative forms of examination already in use in the College, and made a number of observations and recommendations. In particular, it included an investigation into the arrangements for students to re-sit examinations at other than the normal annual examination period. The report was distributed widely within the College and provoked useful discussion. It made it clear that almost every alternative to the orthodox three-hour written paper, and every possible staging of examinations, was already in use in one course or another throughout the University.

A major expansion of the computing facilities available to the College and the University took place in the past year. A grant of £300,000 from the Computer Board for Universities and Research Councils for extra equipment on the IBM 360/65 has more than doubled the capacity of the machine. A supplementary grant of £23,000 allowed the purchase of a communications controller to handle high speed data links from other parts of the University and such a link has also been installed in the Engineering Building.

In November 1970, the College Committee approved regulations for awards from the Hugh Smith Memorial Fund, which had been founded by subscribers to the Fund for establishing a memorial to the late Professor A. H. Smith, Quain Professor of English Language and Literature from 1949 to 1967 and Director of Scandinavian Studies from 1946 to 1963. The regulations provide for an annual award to a student in the Department of English Language and Literature or the Department of Scandinavian Studies working in any of the many fields in which Professor Smith was interested.

A list of publications by members of the College departments will be found on pages 33–87. This is an impressive record and no attempt is made here to summarise the research projects on which the departments have been engaged during the session, many of which

have attracted substantial grants from Research Councils and other grant-giving bodies.

The thirteenth reception to be arranged for former students of the College was held on 7 May, at the invitation of the Provost and the President of the Association of Friends of the College. Seventy-six undergraduate and postgraduate students who entered the College during the period 1956–61 were present. They appreciated the opportunity of meeting again their teachers and student contemporaries.

The fifth Conference of Headmasters and Headmistresses took place at the College from 30 March to 1 April, and proved to be once again a most enjoyable and successful occasion. Over sixty Heads or their deputies representing a broad cross-section of schools in various parts of the country attended. The College greatly values the opportunities given by these conferences of forging personal links with the schools and of giving Heads a better idea of what the College offers.

The 1971 Foundation Oration was delivered by Baroness Lee of Asheridge, in the Collegiate Theatre on 22 March. The subject of her oration was 'Has Chairman Mao the Right Ideas on Education?'.

Association of Friends of University College London

The Friends of University College have continued to assist the College in a number of ways. In 1970–71 they have undertaken to provide grants in support of the following projects: Slade School of Fine Art Centenary Exhibition 1971, which was held in the Diploma Galleries of the Royal Academy, Burlington House, from mid-November to mid-December 1971 (£500); fencing surround for tennis courts at the Shenley Grounds (£500); a bust of Professor A. V. Hill, which will be added to the commemorative display in the entrance hall in the Department of Physiology (£255); portrait of Lord Strang (£100); reception for former students held on 7 May 1971 (£200); maintenance of Film Society's film record of College affairs (£100); record player for the Administrative and Library Staff Common Room (£50); trolley metal frame fitted to the Bosendorfer concert grand piano installed in the Collegiate Theatre by the Friends (£32); an increase in the grant announced last year for the construction of a tennis court and the planting of trees on the Whitcher Place site, from £1,500 to £2,000.

The Association of Friends has played an important part for a number of years in providing much needed amenities. It is hoped that by increasing its membership and subscriptions the Association

will be able to continue to finance those projects which enhance the corporate life of the College, and which cannot be supported by funds from public sources.

SUPPLEMENT

HONOURS AND DISTINCTIONS

In the New Year Honours in 1971 D. Osmond, Chief Constable of the Hampshire Constabulary and a former student in the Faculty of Science, was created a Knight Bachelor. The C.M.G. was conferred on Mrs Lilian K. Somerville (née Tillard), Director of the Fine Arts Department of the British Council and a former student of the Slade School, and the C.B.E. on two more former students of the College: C. Jolliffe, Director of the Science Division of the Science Research Council, and S. R. Walker, lately Deputy Receiver and Director of Administration, Metropolitan Police.

In the Queen's Birthday Honours the Hon. Sir Seewoosagur Ramgoolam, Prime Minister of Mauritius and Fellow of the College, was appointed a member of the Privy Council. Dr C. H. Best, a former student in the Faculty of Medical Sciences, was appointed a Companion of Honour for services to medical research; the K.C.M.G. was conferred on J. E. Killick of the Foreign and Commonwealth Office, a former student in the Faculty of Arts, the C.V.O. on M. A. Sisson, a former student of Architecture, and the C.B.E. on Professor R. A. Gregory, George Holt Professor of Physiology in the University of Liverpool and Fellow of the College, and on H. J. Barnes, Director of the Glasgow School of Art and a former student of the College.

In the course of the year, Sir Solly Zuckerman, Fellow of the College, was created a Life Peer.

A number of interesting and important appointments were announced during the session. Appointments of Honorary Fellows and Fellows of the College included those of Sir Max Rayne as Chairman of the National Theatre Board, Professor Lord Rosenheim as Chairman, appointed by the Department of Health and Social Security, of an advisory group to investigate infection risks in hospital kidney units, Sir Vincent Lloyd-Jones as Deputy Chairman, appointed by the Home Secretary, of the reconstituted Boundary Commission for Wales, Sir Frederick Warner as Chairman of the Council of the School of Pharmacy, Lord Evans as Chairman of

Linguaphone Institute Limited, and Sir John Stevens as Executive Vice-Chairman of Morgan Grenfell and Company Limited. Appointments of former students included Sir John Killick as Ambassador Extraordinary and Plenipotentiary to the U.S.S.R., H. E. Marking as Chairman of British European Airways, C. A. St J. Wilson as the architect to design and build the British Library, Sir Louis Mbanefo as Chairman of the newly-formed Anglican Consultative Council, and the Reverend M. C. Prescott as Queen's Honorary Chaplain and Assistant Chaplain-General, Far East Land Forces, Hong Kong.

Professor Sir Bernard Katz and Professor Sir Harrie Massey were re-appointed Vice-Presidents of the Royal Society for 1971, and Professor L. Fowden was elected a member of the Society's Council; Professor D. R. Wilkie was elected to a Fellowship of the Society, as were Professor B. B. Boycott, Professor of Zoology at the College until the end of 1970, and Dr R. Hide, Visiting Professor to the Department of Mathematics. Dr Mary B. Hesse, formerly both a student and member of staff in the Department of History and Philosophy of Science, and Professor L. B. Schapiro, a former Laws student, became Fellows of the British Academy, and Emeritus Professor L. S. Penrose was elected to an Honorary Fellowship of the Royal Society of Medicine. T. A. L. Paton, Fellow of the College, was elected President of the Institution of Civil Engineers, and Osbert Lancaster, Fellow of the College, Middle Warden of the Worshipful Company of Carpenters.

The Royal College of Art conferred a Senior Fellowship on Sir Robin Darwin, Fellow of the College; L. C. B. Gower, Fellow of the College, Professor R. O. Buchanan, a former member of staff in the Department of Geography, and Mr Justice Professor J. J. Cremona, a former student of Italian, were all elected Honorary Fellows of the London School of Economics and Political Science; and Professor A. T. Hatto, a former Phonetics student and a former member of staff in the Department of German, was elected to a Fellowship of King's College, London.

The following were honoured by election to foreign academies: Professor P. G. Foote was elected a Corresponding Member of Kungl. Vitterhets Historie och Antikvitets Akademien, Stockholm, Professor L. Fowden a Member of Deutsche Akademie der Naturforscher Leopoldina, Professor A. D. Momigliano a Foreign Honorary Member of the American Academy of Arts and Sciences, and Professor Sir Ronald Nyholm and Dr M. L. Tobe Corresponding Members of Accademia Peloritana dei Pericolanti, Sicily.

The University of London conferred the honorary degree of LL.D.

on the late Emeritus Professor Sir Christopher Ingold. Honorary degrees of other universities were conferred on members of the College as follows: the D.Sc. of the Heriot-Watt University on Emeritus Professor H. E. M. Barlow, an honorary doctorate of the Royal College of Art on Sir Robin Darwin, the D.Sc. of the University of Southampton on Professor Sir Bernard Katz, the D.Litt. of the University of Cambridge on Professor A. D. Momigliano, the D.Sc. of the University of Leeds and of the University of Leicester on Professor G. Porter, the D.Litt. of the University of Hull on Sir John Summerson, the D.Litt. of the University of Glasgow on Dr E. Ashworth Underwood, and the D.Litt. of the University of Kent on Professor Elizabeth M. Wilkinson. Honorary degrees were also conferred on two former students: the D.Litt. of the University of Leicester on Dr E. J. M. Bowlby, and the D.Sc. of the University of Nottingham on Dr H. J. Malkin.

Professor Sir Bernard Katz shared with two other scientists the Nobel Prize for Physiology or Medicine for 1970; Lord Annan was awarded a Diamond Jubilee Medal of the Institute of Linguists, Professor C. E. Dent the Graham Gold Medal of the University of London for research work at University College Hospital Medical School, the late Emeritus Professor Dame Kathleen Lonsdale the Actonian Prize of the Royal Institution, Professor J. W. Mullin the 1970 Moulton Medal of the Institution of Chemical Engineers, Dr C. Vita-Finzi the Royal Geographical Society's Back Award for 1971, and Lord Zuckerman the Gold Medal of the Zoological Society of London for his outstanding contribution to the Society's work. Of former students, Professor T. Kempner was awarded the 1971 Burnham Medal of the British Institute of Management, Dr D. Noble, who is also a former member of staff of the Department of Physiology, the scientific medal of the Zoological Society of London, and Professor P. D. Strevens a Diamond Jubilee Medal of the Institute of Linguists.

APPOINTMENTS

Sir John Stevens, who had joined the College Committee in 1970 was appointed Treasurer of the College, in succession to Sir Bernard Waley-Cohen.

At the beginning of the session, J. R. Hale, formerly Professor of History in the University of Warwick, was appointed to the Chair of Italian and the Headship of the Department, and Stephen Spender, who had been Visiting Professor at the University of Connecticut, came to the Chair of English; from within the College Professor

J. H. Burns, Professor of the History of Political Thought, became Head of the Department of History, Dr J. Lynch, formerly Reader in Hispanic and Latin American History, was appointed to the Chair of Latin American History, Professor B. R. Rabin, previously Professor of Enzymology, to the Chair of Biochemistry and the Headship of the Department, and H. S. Smith, who held a Readership in Egyptian Archaeology, to the Edwards Chair of Egyptology and the Headship of the Department. In May 1971, Dr M. Guter came from Contractors John Brown Limited to the second Chair of Chemical Engineering, which had been established with support from industry, and, in July, Dr D. E. N. Davies, previously Assistant Director of Electrical Research, British Railways Board, Derby, came to the Chair of Electrical Engineering, and Professor J. E. C. T. White, formerly Professor of the History of Art at Johns Hopkins University, to the Durning-Lawrence Chair of the History of Art. Members of staff who became Professors by conferment of title were Dr M. Mary Douglas (Social Anthropology), Dr Frieda Goldman-Eisler (Psycholinguistics), Dr D. W. James (Anatomy), Dr A. P. Mathias (Biochemistry), Dr P. A. Samet (Computer Science), Dr Hannah Steinberg (Psychopharmacology), Dr V. P. Underwood (French), and Dr G. L. Watson (Mathematics); and the title of Professor was conferred on Dr Mary R. Truter (Chemistry), in respect of her post of Assistant Director of the Agricultural Research Council's Unit of Structural Chemistry.

The following appointments were made to established Readerships: Dr W. E. Butler, who came from Harvard University (Comparative Law), and, from within the College, Dr B. R. Jewell (Experimental Physiology) and Dr D. G. Larman (Mathematics). The title of Reader was conferred on Dr J. B. Davies (Electrical Engineering), Dr W. J. D. Jones (Engineering Metallurgy), R. J. Loewe (Hebrew), Dr P. A. Matthews (Electrical Engineering), R. M. Maxwell (Architecture), Dr S. H. Walmsley (Chemistry), J. G. Wardrop (Traffic Studies—Rees Jeffreys Reader), Dr P. C. Wason (Psycholinguistics), and A. G. Watson (Manuscript Studies).

The following Visiting Professors were appointed during the session: Professor B. B. Boycott, on his resignation during the session from his post of Professor of Zoology at the College in order to take up an appointment in the Biophysics Department, King's College, London (Zoology and Comparative Anatomy); Professor Wendell V. Clausen, Chairman of the Department of the Classics, Harvard University (Latin and Greek); Professor M. M. David, Professor of Chemical Engineering, University of Washington, Seattle (Civil and

Municipal Engineering); Professor L. R. B. Elton, Head of the Institute of Educational Technology and Professor of Physics, University of Surrey (Physics); J. E. S. Fawcett, Director of Studies, Royal Institute of International Affairs, Member of the European Commission of Human Rights, and formerly Fellow of All Souls College, Oxford (Laws); Dr Sven Linnér, of the University of Uppsala (Scandinavian Studies); Professor G. M. McCue, Head of the Department of Architecture, University of California, Berkeley (Environmental Studies); Professor R. Rodes, Professor at the Notre Dame Law School, Indiana (Laws); Professor E. Shils, Professor of Sociology and Social Thought, University of Chicago, and Fellow of King's College, Cambridge (Anthropology); Sir Frederick Warner, Fellow of the College and Senior Partner of Cremer and Warner, Consulting Chemical Engineers (Environmental Studies); Professor W. J. Whelan, Chairman of the Department of Biochemistry, University of Miami, and formerly Head of the Department of Biochemistry, Royal Free Hospital School of Medicine (Biochemistry).

There were some changes in Faculty appointments: Professor W. R. Mead and Professor I. R. Christie were appointed respectively Dean and Vice-Dean of the Faculty of Arts, and Professor L. Fowden and Professor A. G. Davies respectively Dean and Vice-Dean of the Faculty of Science; Professor A. L. Cullen became Vice-Dean of the Faculty of Engineering.

During the year announcement was made of the following appointments of members of the College to academic posts outside the College: L. C. B. Gower, Fellow of the College, was appointed Vice-Chancellor of the University of Southampton, and Lord Goodman, also a Fellow of the College, was appointed Pro-Chancellor of the University of Warwick. On the academic staff, Dr J. P. Barron was appointed to the Chair of Greek Language and Literature at King's College, London, Professor L. R. B. Elton, Visiting Professor to the Department of Physics, to the new Chair of Science Education in the Institute for Educational Technology at the University of Surrey, and Dr D. P. M. Morton-Williams to the Chair of Sociology in the University College of Cape Coast, Ghana; Professor B. B. Boycott was appointed a member of the Medical Research Council's scientific staff in the Department of Biophysics at King's College, London, and the University of London conferred on him the title of Professor of Biology; and J. H. Westergaard became Reader in Sociology at the London School of Economics and Political Science.

Appointments of the following former members of the academic staff and former students to academic posts outside the College were

also announced: Professor S. Griew as the first Vice-Chancellor of Murdoch University, Western Australia, A. J. V. Chapple to a Chair of English in the University of Hull, R. H. Collcutt as Professor of Operational Research at the Manchester Business School, Professor A. Dalgarno as Chairman of the Department of Astronomy and Acting Director of the Observatory at Harvard University, Professor V. Gold to the Headship of the Department of Chemistry at King's College, London, Professor G. P. Goold as Chairman of the Department of the Classics at Harvard University, P. Holgate to the Chair of Statistics at Birkbeck College, Professor J. M. Ledingham to the Chair of Medicine at the London Hospital Medical College, Professor J. F. M. Middleton to the Chair of African Anthropology at the School of Oriental and African Studies, Dr C. A. C. Mims to the Chair of Microbiology at Guy's Hospital Medical School, Dr V. Moses to the Chair of Microbiology at Queen Mary College, Dr H. P. Rang to the Chair of Pharmacology in the University of Southampton, Professor A. R. Robinson to the Chair of German at the University College of Wales, Aberystwyth, Dr A. V. Subiotto to the Chair and Headship of the Department of German in the University of Birmingham, and Dr D. G. Walker to a Chair of Biochemistry also in the University of Birmingham. The University of London conferred the title of Professor of Politics on Dr B. R. Crick, Birkbeck College, and the title of Professor of Bacteriology on Dr A. A. Glynn, St Mary's Hospital Medical School, and the University of Alberta conferred the title of Professor on L. C. Green. Appointments to Readerships included Dr D. J. Boatman (Botany), University of Hull, Dr D. Legge (Psychology) and Dr W. D. Ray (Statistics) both at Birkbeck College; and the University of London conferred the title of Reader on Dr R. S. Clymo (Botany), Westfield College, on Dr D. W. Grieve (Biomechanics), Royal Free Hospital School of Medicine, on Dr P. M. Sutton (Morbid Anatomy), University College Hospital Medical School, and on Dr J. T. Temple (Palaeontology), Birkbeck College.

RETIREMENTS

Professor L. S. Bosanquet came to the Department of Mathematics from the University of Oxford in 1929, and served it continuously for forty-two years. He became a Reader in 1936 and the title of Professor of Mathematics was conferred on him in 1966. He has an international reputation as an expert in the theory of series and has published a great body of research work in this field. Many of his earlier papers were concerned with developing the intricate theory

of the summability of Fourier series, while much of his later work dealt with the theory of summability factors. He has been an outstandingly successful research supervisor; many of his former students are professors in this country or abroad. He has also helped and encouraged a great many mathematicians through the critical but sympathetic and constructive way he has acted as a referee for their papers. He served for twelve years on the Council of the London Mathematical Society and was editor of its Journal for nine years. He was responsible, during G. H. Hardy's illness and after his death, for seeing Hardy's great book *Divergent Series* through the press; and he is acting as one of the editors preparing Hardy's *Collected Works*. On his retirement the University has conferred on him the title of Emeritus Professor. Happily, he will be continuing his association with the Department as an Honorary Research Fellow.

Professor Thorold Dickinson was appointed Senior Lecturer in Film in the Slade School in 1960. The title of Professor of Film—the first in this country—was conferred on him in 1967, and he has now retired with the title of Emeritus Professor. In 1960 he faced the task of starting from scratch under the generous wing of the Slade School the first university unit in this country concerned specifically with film studies. His previous career uniquely fitted him for the task: as well as being among the most distinguished British post-war directors, he had had experience in all facets of film-making, from editing in the days of silent film to producing and organising the film programme for the United Nations in the late fifties. This acquaintance with the practical and creative business of film-making informed all his activities in setting up and running the film courses. For eleven years students and colleagues were inspired by his great enthusiasm and the generosity with which he shared his wide experience. He was always, and remains, a pioneer at heart, and thoroughly enjoyed meeting the difficulties inevitable in the creation of a new branch of studies. He made a unique contribution to the intellectual life of the College through the linked courses of films and lectures which he organised in association with different departments. Those run with the History Department on problems in modern history, combining lectures by A. J. P. Taylor with films, were particularly successful. His friendliness and éclat will be sadly missed in College, but he leaves behind a well-established new branch of studies which will undoubtedly grow and flourish on the lines he developed: and this is the most appropriate tribute to his long and creative career.

Professor Brian Woledge retired from the Fielden Chair of French Language and Literature, which he had held with distinction for

thirty-two years. He graduated at Leeds in 1926, taking an M.A. there two years later, and the Doctorat de l'Université de Paris in 1930. From this period dates his abiding love of Arthurian literature. After lecturing at Hull and Aberdeen he was appointed to the Fielden Chair in 1939—the first Englishman to hold a chair of French in London. Professor Woledge is widely admired as a scholar of Old French literature and language, combining the exacting traditional virtues of the medievalist with a positively youthful enthusiasm for new approaches and methods. These same qualities are visible in his development of French studies within the College, where he has changed an excellent though conservative French department into an excellent forward-looking one. His appointment of Dr D. P. Walker as Renaissance specialist laid the foundations for a flourishing school of Renaissance studies and for a close collaboration with the Warburg Institute. Similarly, twentieth-century French studies—which had been almost entirely neglected in the College—were firmly established, and there is now an influential school of nineteenth and twentieth century studies. All this has been done without sacrificing other important areas of study. Professor Woledge's principle of the maximum of freedom for colleagues and students has produced a department widely respected for its scholarship, flexible in its teaching methods, and excellent in its examination results. It was a natural corollary that he should, in his last year of office, have started off the College-based degree which he so successfully planned and instituted. As an Emeritus Professor of the University and an Honorary Research Fellow in the College he will be continuing his association with the Department of French.

Dr H. F. Hoar retired from his appointment in the School of Environmental Studies. He entered the Bartlett School of Architecture as a student in 1925 and returned to take up a Lectureship there in 1955. In addition to his work in the College he will be remembered for his witty contributions to *Punch* under the pseudonym of 'Acanthus', and for his magnificent perspective drawings which often appear in the architecture rooms of the Royal Academy.

By the retirement of Anthony Gross and Lynton Lamb the Slade School of Fine Art has lost from its staff two outstanding artists who have given long and devoted service not only to the School but also to the College. Both were pre-eminent in their respective fields of etching and lithography; and their talents, wisdom and kindness will be greatly missed.

Margaret Richards retired after twenty-three years as Permanent Secretary of the Union. During this period she provided vital

continuity between one year and the next, as well as links between one sphere of Union activity and another and between the Union and the College administration. She has made a priceless contribution to the good relations between staff and students that have subsisted here. With complete loyalty to the Union and to its successive Presidents, and with dedication, modesty, tact, and good humour, she always discharged her multifarious duties in the best interests of the students and of the College as a whole. The stability of the College, over the years, has owed much to Margaret Richards. Her departure, mercifully delayed a little though earlier than we had hoped, will be deeply regretted.

RESIGNATIONS

At the end of the session the College Committee lost the services of Lady Walton, who had been a member, on the nomination of the Inner London Education Authority, since 1969.

Four professorial appointments were resigned during the session.

Professor H. C. Allen resigned at the end of the session on appointment as Professor of American Studies in the University of East Anglia. His sixteen years in the Commonwealth Fund Chair of American History saw notable developments in American studies in London. These culminated in the establishment, in 1966, of the University's Institute of United States Studies. This was in large measure due to Professor Allen's energetic initiative, and for the next five years he was to combine his College appointment with exacting responsibilities as the Institute's first Director. Always alert to the need for academic life to adapt itself to changing conditions—he served on the planning committee of the University of Essex—Professor Allen initiated, in association with the annual Commonwealth Fund Lecture in American History, a colloquium which is now a major item in the calendar of American studies in the United Kingdom. Harry Allen's experienced judgment will be widely missed, as will his interventions in debate, often pungent but always genial, in the College and University he served so vigorously.

Professor B. B. Boycott resigned in December 1970 to take up a Medical Research Council appointment in the Biophysics Department of King's College, London. After graduating from Birkbeck College he joined the Department of Zoology and Comparative Anatomy at University College in 1946. In 1947 he became a research assistant to Professor J. Z. Young, and worked with him on the brains of cephalopods. He returned to the Zoology Department in 1952, the title of Reader in Zoology was conferred on him in 1962,

and that of Professor of Zoology in 1968; after his resignation he was Visiting Professor to the Department for the remainder of the session. In 1963 he was visiting lecturer at Harvard and for a time he worked part of each year in Johns Hopkins Hospital Medical School on the structure of the vertebrate retina. He was awarded the Zoological Society of London's Scientific Medal in 1965 for work on vertebrate and cephalopod nervous systems, and was elected a Fellow of the Institute of Biology in 1969. In 1971 he was elected a Fellow of the Royal Society and he became Professor of Biology at King's College by conferment of title.

Professor M. A. K. Halliday resigned from the Chair of General Linguistics and the Headship of the Department at the end of 1970. He came to the College from the University of Edinburgh in 1963 as Director of the Communication Research Centre, and during the following seven years, with substantial support from outside grants, he initiated two major research projects under the aegis of the Centre —one on the syntax of scientific English, and the other, much larger, on the application of linguistics to English teaching. This work started off within the Department of English, but after two years the Department of General Linguistics was set up, with Michael Halliday as its head. He had become Reader in General Linguistics by conferment of title in 1964, and in 1965 he was appointed to the newly-established Chair of General Linguistics. Over the following years the hoped-for development of the Department was frustrated by the general lack of funds, but he initiated first a postgraduate and then an undergraduate teaching programme in Linguistics. Both in research and in teaching his contribution was outstanding.

Professor Paul Wheatley left at the end of the session to take up a Chair of Geography at the University of Chicago. He had been appointed to the second established Chair of Geography at the College in 1966, having been Associate Professor from 1958 to 1963 and Professor of Geography and Professor of History from 1963 to 1966 on the Berkeley campus of the University of California. At Berkeley he had also been Chairman of the Centre for South-East Asian Studies. Against the background of his long-established interest in South-East Asia, Professor Wheatley worked principally on the formulation of a general theory of urban genesis. The traditional city of the non-Western World was his main preoccupation and while at University College he published a major work on the origins of the Chinese City—*The Pivot of the Four Quarters*—as well as papers on traditional urbanism in Asia, West Africa, and elsewhere. In the Department he played a particularly active part in restoring and

developing the field of cultural geography at both undergraduate and postgraduate levels and he also inaugurated a most valuable postgraduate seminar in the philosophy and methodology of research.

OBITUARY

We record with regret the death during the year of a number of members and former members of the College. They included two Honorary Fellows and six Fellows.

The College lost an outstanding Chemist by the death of Sir Christopher Ingold on 8 December 1970. He came to University College as Professor of Chemistry in 1930 and became Director of the Chemical Laboratories in 1937. He saw the evacuation of the Chemistry Department to Aberystwyth in 1939 and brought it back in 1944. After his retirement in 1961 he continued as Emeritus Professor and Special Lecturer to play an active part in the Department. Sir Christopher acted as Vice-Provost of the College during the absence of the Provost in 1959, and in 1964 he was elected to an Honorary Fellowship of the College. He made outstanding contributions to the growth of present ideas in chemistry. He introduced classifications, concepts, and terminology which have profoundly influenced the development of organic chemical theory. He had an immense knowledge of chemistry ranging over the whole field and brought this to bear on research on electronic theory, on mechanisms of reactions in organic and inorganic chemistry, and also on molecular spectroscopy. Not surprisingly, he led a unified Department, without divisions into the usual branches, and he attracted to it research workers from all over the world. Those who worked with him held him in great esteem and affection, and a volume of tribute, *Studies in Chemical Structure and Reactivity*, edited by J. H. Ridd, was published in 1966. A further mark of affection and admiration was the association of his name with the new Chemistry building, which was officially opened as 'The Christopher Ingold Laboratories' by Lady Ingold on 28 September 1970. His research led to a great stream of publications from the Department, frequently appearing in characteristic batches, making major changes in a number of areas. He brought together, in 1953, the developments in the understanding of chemical reactions in organic chemistry in a comprehensive work, *Structure and Mechanisms in Organic Chemistry*. In the later years of his retirement he expanded the book and brought it up to date for the publication of a second edition in 1970. Sir Christopher's contributions to chemistry were widely recognised by the many honours conferred on him, both at home and abroad, including a large

number of honorary degrees. He was President of the Chemical Society from 1952 to 1954, and he was knighted in 1958. A brilliant lecturer, he was a stimulating teacher not only of those who collaborated in research, but also of undergraduates. He played a major part in the design and introduction of the B.Sc.(Special) Degree in Chemistry. He married in 1924 Edith Hilda Usherwood, who had already made important contributions to chemical research. Sir Christopher often acknowledged the great help and support which she gave him, both in his scientific work and in the administration of the Department.

Sir Frederick James, an Honorary Fellow since 1957, died on 18 January 1971. He was a member of the College Committee for seventeen years from 1948, and its Vice-Chairman from 1955 to 1962. As well as serving on the Managing Committee, the Finance Committee, and other standing committees, he was Treasurer of the College from 1952 to 1962. Much of this period, when the College was recovering from heavy war damage, was a time of financial austerity and conditions were not easy. Sir Frederick's sympathy and understanding for learning and scholars gave encouragement to the whole academic community during a frustrating period. The College owes much to him for the unsparing and detailed attention he gave to the Treasurer's duties and for his devotion to the welfare of the College, despite numerous commitments in other fields of activity.

The death occurred on 6 June 1971 of Emeritus Professor E. N. da C. Andrade, Fellow of the College since 1916, and Quain Professor of Physics and Director of the Physical Laboratories from 1928 to 1949. Prior to taking up the Quain Chair he had been Professor of Physics at the Artillery College, Woolwich, from 1920. His best-known research was on the physics of metals, but he also did important work on the study of creep in metals, putting the subject on a scientific basis, and on the physics of liquids. He was a student of seventeenth-century science, being an authority on Hooke and Newton. As writer, lecturer, and broadcaster he did much to promote an interest in science; on three occasions he gave the Royal Institution's Christmas lectures. From 1950 to 1952 he was Director in the Royal Institution, Resident Professor, and Director of the Davy Faraday Research Laboratory. He became a Fellow of the Royal Society in 1935, and in 1958 the Society honoured him by the award of its Hughes Medal.

Emeritus Professor Dame Kathleen Lonsdale, who retired from her Professorship of Chemistry in 1968, died on 1 April 1971. She entered University College Hospital in December 1970, and once

aware of the necessity to consider her priorities, decided to utilise her time there to complete various projects in which she had retained an interest since her retirement, and to continue work on a book on thermal expansion scheduled as Volume 5 of the definitive series on *The Crystalline State*. No one who knew her will be surprised to know that when correspondence with her co-authors in the United States was interrupted by the postal strike she immediately began, and completed in a few weeks, another book in collaboration with a colleague in the Department of Chemistry. Dame Kathleen Lonsdale's scientific achievements and long association with the College, which she entered as a research student in the Department of Physics under Sir William Bragg in 1922, and of which she became a Fellow in 1952, were recalled in the Report for 1967–68. One of the leading scientists of her time and a redoubtable fighter for peace and for women's rights, she was one of the first two women elected to a Fellowship of the Royal Society, the first woman President of the British Association, and the first woman to hold a Professorship in the College. Dame Kathleen, who had been an active member of the Society of Friends since 1935, managed throughout her life to combine her scientific career with a lively concern for better understanding between individuals and groups, both within nations and between them, and at all levels, from undergraduates to elder statesmen. Her premature death came as a shock to her many friends throughout the world.

Other Fellows who died during the year were Major-General Sir Ernest Cowell, a Fellow since 1918, who had been Director of Medical Services, Allied Forces, North Africa, Honorary Surgeon to King George VI, and a Deputy Lieutenant for Surrey; Professor J. A. Hawgood, Professor of American History in the University of Birmingham and at one time a member of staff of the Department of History at the College; Mrs Gwen Hilton, formerly Director of the Radiotherapy Department at University College Hospital; and Harry Sacher, formerly a Director of Marks and Spencer Ltd and a generous benefactor of the Friends of University College.

The College lost by death four members of its academic staff.

Emeritus Professor W. B. Emery, who had been Senior Research Fellow in the Department of Egyptology since his retirement from the Edwards Chair in 1970, died on 11 March 1971. Born in Liverpool in 1903, he pursued through life a passion for Egyptology conceived in boyhood. At twenty-one he restored the splendid tomb of Ramose at Thebes. He discovered the Buchis bull-burials at Armant, and led the second great archaeological survey of Nubia. At Ballana he

excavated the tumuli of pagan Nubian kings, extracting marvellous fragile silver treasures. In 1935 he started work at North Saqqara, where he excavated what may be the tombs of the earliest kings of Egypt. In the war he served with distinction as Director of Intelligence at Headquarters, British Forces in Egypt, and in 1946 joined the British Embassy in Cairo, where he rose to be First Secretary. Elected Edwards Professor of Egyptology in this College in 1951, he returned to Saqqara to dig. He moved work to the Sudan in 1956. Throughout the UNESCO Nubian campaign Emery acted as archaeological adviser, and himself excavated the fortresses of Buhen and the cemeteries of Qasr Ibrim. In 1964 he returned to Saqqara; he rediscovered the lost catacombs of the sacred ibises, sacred hawks, and sacred baboons, and finally the burial-place of the Mothers of the Apis-bull, recovering many splendid bronzes, statues, and documents. Emery's work was his life, and brought him high honours. But they never changed the modest sincerity, straightness, kindliness, and bluff good humour which made him beloved everywhere. At College he took over a Department disorganised by war: steadily and quietly he re-asserted its international reputation. But what inspired his colleagues was his warmth, optimism, and cheerfulness, and the courage with which latterly he overcame pain to pursue his life-work. He died as he had lived, excavating in his beloved Egypt; at his funeral in Cairo on 13 March, the Egyptian nation movingly expressed its affection and gratitude.

The death occurred on 4 February 1971 of H. S. Tomlinson, Assistant in the Department of Physics, who came to the College in 1950 from the Atomic Energy Research Establishment, Harwell. He was one of the most effective and original designers of scientific instruments in the country, and his work has been of outstanding value to the Department. For a number of years he was fully engaged in the development by the Department of a Heavy Liquid Bubble Chamber for the National Institute for Research in Nuclear Science. Recently he had been responsible for the design and construction of a controllable telescope to be carried on balloons for infra-red astronomy.

Dr H. E. Lewis was associated with the Department of Physiology for twenty-three years until his sudden death on 21 June 1971. He joined the Department in 1948 and resigned from his Lectureship in 1954 to take up an appointment with the Medical Research Council; he had been an Honorary Lecturer since 1955, and always retained a close interest, and many friends, in the College. In 1954 he was awarded the Polar Medal for his services as physiologist to the British

North Greenland Expedition, which he accompanied in 1952–53.

Dr Jean C. Buxton, who had been an honorary member of the staff of the Department of Anthropology since 1964, died on 9 June 1971.

We have to report the death of a number of former members of the academic staff. Among them was Sir Lindor Brown, formerly Jodrell Professor of Physiology. He came to the Chair from the National Institute for Medical Research in 1949, and left in 1960 on his appointment to the Waynflete Chair of Physiology in the University of Oxford. Under his direction the Department of Physiology expanded actively, both in teaching and in research, and despite his activities in a wider sphere, which included the duties of Biological Secretary and Vice-President of the Royal Society, he played an important part in College affairs outside his own Department. He was Principal of Hertford College, Oxford, from 1967 until his death on 22 February 1971.

Dr C. R. Bailey, who retired from his Readership in Chemistry in 1954 after thirty-four years on the staff of the Department of Chemistry, died on 25 February 1971. He was one of the pioneers who helped to establish the subject of infra-red band spectroscopy. Outside his academic work, he played an important part in the life of the College. He was Chairman of the Refectory Committee from 1948 to 1954, and on his retirement the College Committee recorded their thanks to him for his great services to the Refectory during those difficult years. He also served as secretary of the Staff Common Room and, earlier, in the Officers Training Corps. He will be remembered as a witty and stimulating common room companion, and one who did much to ensure that the annual Chemistry Laboratory Dinner was a most enjoyable reunion.

The College heard during the session of the death in Oslo, on 20 September 1970, of I. C. Gröndahl, formerly W. P. Ker Lecturer in Norwegian in the Department of Scandinavian Studies. He was appointed when the Department was founded in 1918, and, apart from a period during the war, he served continuously up to the time of his retirement in 1948. He did much to establish the study of his subject and made many contributions to its advancement.

R. C. White-Cooper, who died on 23 October 1970, had a long and distinguished career as an architect and in the education of architects. He entered the Bartlett School of Architecture in 1914 and, after war service, returned to gain his degree in 1921. He was a member of the staff of the School from 1931 to 1963 and became Tutor to Architecture Students in 1952. As architect to the College, he was responsible for the new Students' Refectory and for the Tea Pavilion and

groundsman's house at the Union Athletic Ground, Shenley. The numerous students who passed through his care will remember with gratitude his wise counsel and personal understanding.

Other former members of the academic staff who died were Dr S. L. Cowan, a former student in the Faculty of Science and member of staff in the Departments of Physiology, Pharmacology, and Biochemistry during the periods 1931 to 1934 and 1936 to 1939; R. A. Welldon Finn, Research Assistant in the Department of Geography from 1955 to 1958 and from 1964 to 1966; Dr H. Jungmann, a former research student and member of staff in the Department of Anatomy and Embryology from 1947 to 1954; and Dr A. M. Parry, Visiting Professor to the Department of Greek in 1968–69.

On the administrative staff, the death of R. L. Gregory on 27 February 1971 ended an association with the College of more than fifty years. He joined the staff in 1919, and after retirement from the post of Superintendent of Office Services in 1969 he became a part-time administrator at the Mullard Space Science Laboratory at Holmbury St Mary. The former Secretary of the College, E. A. L. Gueterbock, writes: It is not often that a man finds himself in a job with just the right qualifications at just the right time to use them. Ron Gregory was such a man. When the College returned to Gower Street after its dispersions in World War II, a central administration had to be organised in makeshift accommodation with what staff was available and with inadequate and out-of-date equipment. Improvements took time. In particular, modern office equipment was unobtainable for several years after the end of the war. In his capacity as Chief Clerk, Gregory was charged with the development of the machinery of the central administrative offices to save labour, promote efficiency, and deal with rapidly expanding requirements. With great energy he searched for new equipment and sought advice from its users so as to buy the best for the purposes of the College. He arranged for his operators to be well trained, and ensured that they could and did produce first class results. Above all, he had a happy and efficient team. No matter how heavy the pressure of work, he and his staff coped with it cheerfully and well. His colleagues will remember him with admiration and gratitude.

Mention should also be made of the death of H. C. C. Monahan, College Establishment Officer from 1946 to 1952, and of Mrs Margaret Cunyngham-Brown, House Warden of Bentham Hall from 1949 to 1965.

In the course of the year the College heard with regret of the death of many of its former students. Among them were the Rev. A.

Montgomery Mann, a student in the Department of Philosophy from 1910 to 1914 and in 1918–19, who served on the College Committee from 1964 to 1968 on the nomination of the Old Students' Association, and was President of the Association from 1961 to 1963; Lord Bowles, formerly Deputy Chairman of Ways and Means and Labour Member of Parliament for Nuneaton from 1942 to 1964; Wing Commander D. I. Fryer, an authority on aviation medicine; Robin Guthrie, the landscape and portrait painter; Professor Denis Gwynn, formerly Research Professor of Modern Irish History at University College, Cork; A. R. Hayward, the artist; Professor M. M. Lewis, Emeritus Professor of Education in the University of Nottingham; A. E. Popham, formerly Keeper of the Department of Prints and Drawings in the British Museum; and W. D. C. Wiggins, the distinguished surveyor and cartographer.

PUBLICATIONS

BY MEMBERS OF COLLEGE DEPARTMENTS

1 AUGUST 1970—31 JULY 1971

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R. J. Rowbury, M.A., D.PHIL.
R. M. Simmons, PH.D.
R. Staveley, B.A., F.L.A.
P. Venning, M.S.R.
R. A. Webster, PH.D.
M. G. F. Wilson, B.SC.(ENG.), PH.D., C.ENG., M.I.E.E.

*Appointed a full member of the Professorial Board from January 1971.

APPENDIX III

HONORARY FELLOW AND FELLOWS

The following elections were made in 1971:

HONORARY FELLOW

Sir Peter (Brian) Medawar, C.B.E., F.R.S., Director, National Institute for Medical Research, Mill Hill; formerly Jodrell Professor of Zoology and Comparative Anatomy, University College London; Nobel Prize for Physiology or Medicine 1960.

FELLOWS

Professor Arthur Brown, Professor of Library Studies and Director of the School of Library, Archive, and Information Studies, University College London.

Professor Alan Chadburn Burton, M.B.E., F.R.S.(CAN.), Professor of Biophysics and Head of the Department of Biophysics, University of Western Ontario.

Mr Demetre (John) Comino, O.B.E., Chairman, Dexion-Comino International Limited.

Professor Satya Prakash Datta, Professor of Medical Biochemistry, and Dean of the Faculty of Medical Sciences, University College London.

Professor John Arkas Hawgood, Professor of American History in the University of Birmingham; formerly Professor of Modern History (and of Government) and Head of the School of History.*

Professor Ralph Ambrose Kekwick, F.R.S., Professor of Biophysics, Lister Institute of Preventive Medicine.

The Hon. Sir Seewoosagur Ramgoolam, P.C., Prime Minister of Mauritius, and Minister of Defence and Internal Security and Minister of Information and Broadcasting.

Professor Frederick Denys Richardson, F.R.S., Professor of Extraction Metallurgy, Imperial College of Science and Technology.

Mr Richard Seifert, J.P., Architect, and Principal of R. Seifert and Partners.

Dr (Elizabeth) Joan Stokes (née Rooke), Consultant Bacteriologist to University College Hospital, and Head of the Department of Clinical Bacteriology.

*Died 16 September 1971.

APPENDIX IV

PRINCIPAL CHANGES IN THE ACADEMIC STAFF

FACULTY OF ARTS

ANTHROPOLOGY

Appointments: P. C. Burnham, M.A. (Lecturer), formerly Research Fellow, University of California, Los Angeles.
D. A. Coleman, B.A. (Lecturer), formerly research worker, London School of Economics and Political Science.
N. C. David, PH.D. (Lecturer), formerly Assistant Professor, University of Pennsylvania.
A. J. Kuper, PH.D. (Lecturer), formerly Lecturer, Makerere University College, Kampala.
R. H. Layton, B.SC., M.PHIL. (Lecturer), formerly Research Assistant, University of Sussex.
E. Shils, M.A. (Visiting Professor), Professor of Sociology and Social Thought, University of Chicago, and Fellow of King's College, Cambridge.

Resignation: D. P. M. Morton-Williams, PH.D. (Lecturer), to Chair of Sociology, University College of Cape Coast, Ghana.

ARCHAEOLOGY

Resignation: J. P. Barron, M.A., D.PHIL., F.S.A. (Reader in Archaeology and Numismatics), to Chair of Greek Language and Literature, King's College, London.

COMPARATIVE PHILOLOGY

Appointment: P. Considine, B.A., PH.D. (Lecturer), from Dublin Institute for Advanced Studies.

EGYPTOLOGY

Appointment: G. T. Martin, M.A., PH.D. (Lecturer), formerly Research Fellow, Christ's College, Cambridge.

Death: W. B. Emery, C.B.E., M.A., D.LIT., F.B.A., F.S.A. (Emeritus Professor and Senior Research Fellow).

ENGLISH LANGUAGE AND LITERATURE

Appointments: M. Y. Mason, M.A., B.LITT. (Lecturer), formerly Lecturer, University of Edinburgh.
Stephen Spender, C.B.E., D.LITT. (Professor of English), formerly Visiting Professor, University of Connecticut.

FINE ARTS

Appointment: Malcolm Hughes, D.A., A.R.C.A. (Part-time Lecturer).

Retirements: Thorold Dickinson, B.A. (Professor of Film).
Anthony Gross (Part-time Lecturer).
Lynton Lamb (Part-time Lecturer).

Resignations: M. Challenger (Part-time Lecturer).
Robyn Denny (Part-time Lecturer).

FRENCH

Retirement: B. Woledge, M.A., D.DE L'UNIV. (Fielden Professor of French Language and Literature); to be Honorary Research Fellow.

GEOGRAPHY

Appointments: A. G. Gilbert, PH.D. (Lecturer), formerly Research Fellow, Institute of Latin American Studies.
G. E. Hollis, B.SC. (Lecturer).

Resignations: N. Harris, B.A., PH.D. (Deputy Director of Studies, Postgraduate Course on Urbanization in Developing Countries at the Centre for Urban Studies).
P. Wheatley, M.A., PH.D. (Professor of Geography), to Chair of Geography, University of Chicago.

GREEK

Resignations: P. W. Fulford-Jones, M.A. (Lecturer), to Home Civil Service.
G. H. Gellie, M.A., B.ED. (Visiting Professor).

HISTORY

Resignations: H. C. Allen, M.C., M.A. (Commonwealth Fund Professor of American History), to Professorship of American Studies, University of East Anglia.
J. A. Thompson, B.A., PH.D. (Lecturer), to Assistant Lectureship, University of Cambridge.

HISTORY OF ART

Appointment: J. E. C. T. White, M.A., PH.D. (Durning-Lawrence Professor of the History of Art), formerly Professor of the History of Art, Johns Hopkins University.

ITALIAN

Appointment: J. R. Hale, M.A., F.S.A. (Professor of Italian), formerly Professor of History, University of Warwick.

LATIN

Resignation: P. W. Fulford-Jones, M.A. (Lecturer), to Home Civil Service.

GENERAL LINGUISTICS

Appointments: R. A. Hudson, PH.D. (Lecturer), formerly held research and honorary appointments in Department.
Deirdre S. M. Wilson, B.A., B.PHIL. (Lecturer), formerly Harkness Fellow, Massachusetts Institute of Technology.

Resignation: M. A. K. Halliday, M.A., PH.D., D.H.C.(NANCY) (Professor of General Linguistics and Director, Communication Research Centre).

PHILOSOPHY

Appointment: J. J. Valberg, M.A., PH.D. (Lecturer), formerly held temporary appointment in Department.

POLITICAL ECONOMY

Appointments: D. K. Lal, M.A., B.PHIL. (Lecturer), formerly Research Fellow, Nuffield College, Oxford.

A. Markandya, M.SC. (Lecturer), formerly Temporary Lecturer, London School of Economics and Political Science.

SPANISH

Appointment: Nissa Torrents, B.A., M.PHIL. (Lecturer), formerly Temporary Lecturer, Queen Mary College.

FACULTY OF LAWS

LAWS

Appointments: W. E. Butler, M.A., J.D., PH.D. (Reader in Comparative Law), formerly Research Associate, Harvard Law School.

J. E. S. Fawcett, D.S.C., M.A. (Visiting Professor), Director of Studies, Royal Institute of International Affairs.

Resignations: J. H. Baker, PH.D. (Lecturer), to Fellowship, St Catherine's College, Cambridge.

P. B. H. Birks, M.A., LL.M. (Lecturer), to Fellowship, Brasenose College, Oxford.

Mrs Ann R. Everton, PH.D. (Lecturer), to Lectureship, University of Leicester,

I. M. Kennedy, LL.B. (Lecturer).

FACULTY OF SCIENCE

ASTRONOMY

Appointment: D. Fawell, PH.D. (Lecturer), formerly Assistant Experimental Officer, Royal Greenwich Observatory.

BOTANY AND MICROBIOLOGY

Appointment: R. N. Strange, PH.D. (Lecturer), formerly Agricultural Research Council Senior Research Fellow, University of Birmingham.

CHEMISTRY

Appointments: J. E. Anderson, PH.D. (Lecturer), formerly held honorary appointment in Department.

A. J. Deeming, PH.D. (Lecturer), formerly held research and honorary appointments in Department.

A. C. Legon, PH.D. (Lecturer), formerly held honorary appointment in Department.

J. F. Wilson, PH.D. (Lecturer), formerly held honorary appointment in Department.

Death: Sir Christopher Ingold, D.SC., F.R.S. (Emeritus Professor and Special Lecturer).

GEOLOGY

Appointment: N. J. Preston, B.SC. (Lecturer), formerly Geologist, Soil Mechanics Ltd.

Resignations: F. W. Anderson, D.SC. (Visiting Professor).
P. G. Llewellyn, PH.D., A.F. INST.PET. (Lecturer), to Exploration Department, British Petroleum Company Limited, appointed Honorary Research Fellow.

HUMAN GENETICS AND BIOMETRY

Resignation: D. P. Brenton, B.A., M.B., B.CHIR., M.R.C.P. (Lecturer), to Medical Research Council Travelling Fellowship, University of Southern California.

MATHEMATICS

Appointment: P. McMullen, M.A., PH.D. (Lecturer), formerly Visiting Assistant Professor, Michigan State University.

Retirement: L. S. Bosanquet, M.A., D.PHIL., D.SC. (Professor of Mathematics); to be Honorary Research Fellow.

PHYSICS

Appointment: L. R. B. Elton, PH.D., D.SC., F.INST.P., F.I.M.A. (Visiting Professor), Professor of Physics and Head of Institute for Educational Technology, University of Surrey.

Death: H. S. Tomlinson (Assistant).

PSYCHOLOGY

Appointment: Mrs Catherine G. Weir, PH.D. (Lecturer), formerly Lecturer, University of Reading.

ZOOLOGY AND COMPARATIVE ANATOMY

Appointment: D. S. O'Dell, PH.D. (Lecturer), formerly held research and honorary appointments in Department.

Resignations: B. B. Boycott, B.SC., F.R.S. (Professor of Zoology), appointed a member of Medical Research Council's scientific staff, Department of Biophysics, King's College, London; title of Professor of Biology conferred by University of London.
Irene Gore, PH.D. (Research Fellow).

FACULTY OF ENGINEERING

CHEMICAL ENGINEERING

Appointments: L. G. Gibilaro, PH.D. (Lecturer), formerly Lecturer, Loughborough University of Technology.
M. Guter, PH.D., A.R.C.S., C.ENG., M.I.CHEM.E. (Professor of Chemical Engineering), from Constructors John Brown Ltd.

CIVIL AND MUNICIPAL ENGINEERING

Appointment: J. G. A. Croll, B.E., PH.D. (Lecturer), formerly held research and honorary appointments in Department.

ELECTRONIC AND ELECTRICAL ENGINEERING

Appointment: D. E. N. Davies, D.SC., C.ENG., F.I.E.E., M.I.E.R.E. (Professor of Electrical Engineering), formerly Assistant Director of Electrical Research, British Railways Board, Derby.

MECHANICAL ENGINEERING

Appointments: C. V. Betts, M.A., R.C.N.C. (Lecturer), from Royal Corps of Naval Constructors.

R. K. Burcher, B.SC.(ENG.), R.C.N.C., C.ENG., M.R.I.N.A. (Senior Lecturer), from Royal Corps of Naval Constructors.

Resignation: D. J. Low, R.C.N.C., C.ENG., M.R.I.N.A., M.I.MECH.E. (Senior Lecturer), to Ministry of Defence, Ships Division, Foxhill, Bath.

PHOTOGRAMMETRY AND SURVEYING

Appointments: B. Chiat, B.SC., A.R.I.C.S. (Lecturer), formerly Lecturer, University of Oxford.

I. J. Dowman, B.SC. (Lecturer), formerly Lecturer, Bedford College.

FACULTY OF MEDICAL SCIENCES

ANATOMY AND EMBRYOLOGY

Appointments: Jonathan Miller, M.B., B.CHIR. (Research Fellow, Sub-Department of History of Medicine).

T. R. Price, B.SC. (Lecturer).

C. C. Wylie, B.SC. (Lecturer), formerly held temporary appointment in Department.

Resignation: R. A. Weiss, B.SC., PH.D. (Lecturer), to Imperial Cancer Research Fund.

BIOCHEMISTRY

Appointment: Professor W. J. Whelan, PH.D. (Visiting Professor), Chairman of the Department of Biochemistry, University of Miami.

PHARMACOLOGY

Appointment: D. G. Haylett, PH.D. (Lecturer), formerly held research and honorary appointments in Department.

FACULTY OF ENVIRONMENTAL STUDIES

ENVIRONMENTAL STUDIES

Appointments: I. G. Cullen, B.A., M.PHIL. (Lecturer), formerly held research appointment in Department.

Mrs Joan Davidson, M.A., M.SC. (Lecturer), formerly Research Officer, Countryside Commission, London.

R. A. Howard, A.A.DIP., A.R.I.B.A. (Lecturer), from private practice.

H. R. Kirby, M.A. (Lecturer), from Road Research Laboratory, Ministry of Transport.

O. H. G. Koenigsberger, D.ENG., DIPL.ENG., A.M.T.P.I. (Director of Studies in Development Planning), formerly Head of the Department of Development and Tropical Studies, Architectural Association, London.

B. B. Nutt, B.A. (Lecturer), formerly held honorary appointment in Department.

J. M. Simmie, B.SC.(ECON.), M.PHIL. (Lecturer), formerly Senior Lecturer, Oxford Polytechnic.

A. J. Smith, B.ARCH., DIPL.D., M.U.P., A.R.I.B.A., A.I.L.A. (Lecturer), formerly Architect/Planner, Messrs Halpern and Partners, London.
Sir Frederick Warner, D.SC., D.TECH., C.ENG., F.I.MECH.E., M.I.CHEM.E., M.CONS.E. (Visiting Professor), Senior Partner, Cremer & Warner, Consultant Chemical Engineers.

Retirement: H. F. Hoar, B.A., PH.D., F.R.I.B.A., A.M.T.P.I. (Lecturer).

Resignation: R. W. Mace (Lecturer).

APPENDIX V

PUBLIC LECTURES

ENDOWED LECTURES

BARLOW LECTURES ON DANTE

Dr Patrick Boyde, Cambridge: 'Dante and the Individual' (three lectures)

CHAMBERS MEMORIAL LECTURE

Professor Norman Davis, Oxford: 'William Tyndale's English of Controversy'

COMMONWEALTH FUND LECTURE

Professor Richard P. McCormick, Rutgers: 'The Imperfect Union, 1789–1860'

MILDNER LECTURE

Professor H. E. M. Barlow: 'High-frequency Cables'

THE FIRST NEALE LECTURE IN ENGLISH HISTORY

Dame Veronica Wedgwood: 'Oliver Cromwell and the Elizabethan Inheritance'

LORD NORTHCLIFFE LECTURES IN LITERATURE

Professor Eugène Vinaver: 'A Quest for Form in Medieval Verse and Prose' (four lectures)

RICKMAN GODLEE LECTURE

Dr Macdonald Critchley: 'Lingua Adamica Restituta'

SETON MEMORIAL LECTURE

Sir Anthony Wagner: 'Heraldry and the Historian'

INAUGURAL LECTURES

Professor R. Banham, Professor of History of Architecture: 'At Shoo-Fly Landing (Architecture is that which changes land-use)'

Professor J. Lynch, Professor of Latin American History: 'The Second Conquest of America, 1765–1808'

Professor J. W. Mullin, Professor of Chemical Engineering: 'Crystallization: a Study in Molecular Engineering'

Professor Stephen Spender, Professor of English: 'Form and Pressure in Poetry'
Professor V. P. Underwood, Professor of French: 'The University, Humanity, Poetry and Verlaine'
Professor G. L. Watson, Professor of Mathematics: 'Diophantine Equations'
Professor G. P. Wibberley, Ernest Cook Professor of Countryside Planning: 'Rural Planning in Britain—a study in contrast and conflict'
Professor D. R. Wilkie, Jodrell Professor of Physiology: 'Muscles as Machinery'

LUNCH-HOUR LECTURES AND FILMS

LECTURES

Mr R. W. Archer: 'Canberra, a planned city for car travel'
Mrs Lisbeth-Anne H. Bawden: 'Medium Thoughts'
Professor R. L. F. Boyd: 'X-ray Astronomy'
Professor Arthur Brown: 'The Gentle Art of Dedicating Books'
Dr W. G. Chaloner: 'When Palm Trees Grew in London'
Dr A. Comfort: 'The Control of Ageing in Man'
Dr P. N. Dilly: 'Expedition Doctoring'
Professor M. Mary Douglas: 'Unbearable, Inedible, Incredible'
Mr M. D. A. Freeman: 'Do We Need a National Legal Service?'
Mr A. G. Gilbert: 'Andean Development Problems: Case Studies from Colombia and Peru'
Dr P. A. Jewell: 'Can Large Mammals Survive in the Wild?'
Professor H. Kalmus: 'The Flow of Information in a University'
Professor J. F. Kermode: 'Mid-Edwardian English Fiction'
Dr J. W. Miller: 'The Dog Beneath the Skin (Sir Henry Head's experiments on cutaneous nerve section)'
Dr J. D. Moores: 'Harlequin Unmasked'
Dr I. Morris: 'Food from the Oceans—Is the Future Really Promising?'
Dr S. A. F. Murrell: 'Earthquakes'
Miss Marie Seton: 'Satyajit Ray'
Dr W. A. Smeaton: 'Decimalisation—The Eighteenth-Century Origins'; 'Decimalisation—The Nineteenth Century Debates'
Mr M. J. Stewart: 'Was Keynes Wrong?'
Mr A. J. P. Taylor: 'Lord Beaverbrook in the Second World War?'
Dame Veronica Wedgwood: 'Some Diaries of the Great Civil War?'
Professor D. H. White: 'Have Physicists lost their Imagination?'
Professor B. Woledge: 'Putting Roland into the Computer'
Professor Richard Wollheim: 'On the Idea of a University'
Professor J. Z. Young: 'Some Facts about the Problems of Brain and Mind'

FILMS

'Workshop for Peace' (United Nations film), introduced by Mr Ken Pittendrigh, United Nations London Office
'Une Partie de Campagne' (Jean Renoir's film from stories by Guy de Maupassant), introduced by Professor Thorold Dickinson
'Das wort aus Stein' (a film on the architecture of the Nazi regime), introduced by Mr Lutz Becker
'Opus' and five short films by Don Levy, introduced by Mrs Lisbeth-Anne H. Bawden

'Bulles de Savon' (a film by Slatan Dudov), introduced by Mr Lutz Becker
'Misère au Borinage' and 'Le Mur' (two political films by Henri Storck), introduced by Professor Thorold Dickinson

LECTURES ARRANGED BY COLLEGE DEPARTMENTS

This list includes only those lectures given by visiting lecturers or by honorary members of the staff.

HISTORY

Professor Franco Venturi, Turin: 'Cesare Beccaria and the Enlightenment'

LAWS

Professor J. E. S. Fawcett, Vice-President, European Commission of Human Rights: 'The European Convention on Human Rights: Recent Trends'

SCANDINAVIAN STUDIES

Mr Uno Enegren, Chairman, Swedish Iron Ore Ltd: 'Iron Ore—Sweden and England'

APPENDIX VI

NUMBERS OF STUDENTS, SESSION 1970–71

	Under-graduates	*Post-graduates*	*Totals*
Faculty of Arts	1,270 (317)	529 (205)	1,799 (522)
Department of Political Economy ..	178 (15)	21 (6)	199 (21)
Slade School of Fine Art	101 (13)	73 (6)	174 (19)
	1,549 (345)	623 (217)	2,172 (562)
Faculty of Science	986 (21)	*475 (138)	1,461 (159)
Faculty of Medical Sciences	†267 (3)	3 (1)	270 (4)
Faculty of Engineering	334 (22)	199 (63)	533 (85)
Faculty of Laws	‡382 (14)	§191 (72)	573 (86)
Faculty of Environmental Studies ..	137 (5)	216 (84)	353 (89)
	3,655 (410)	¶1,707 (575)	5,362 (985)

The figures in brackets indicate the number of part-time students included in the total under each head.

*This figure includes 74 full-time and 37 part-time postgraduate students working in the College Faculty of Medical Sciences who were registered in the University Faculty of Science.

†There are included as full-time 43 students, studying for 2nd M.B., who left the College at the end of the second term, having concluded the course.

‡This figure includes 49 full-time and 2 part-time undergraduate students studying for a B.Sc. in International Relations who were registered in the University Faculty of Economics.

§This figure includes 7 full-time and 3 part-time postgraduate students studying for an M.Sc. in International Relations who were registered in the University Faculty of Economics.

¶Of this number 1,303 were registered for higher degrees of the University of London; the remainder were working for higher diplomas of the University or of the College, or for higher degrees of other universities or were engaged in research work, or attending postgraduate lecture courses.

APPENDIX VII

GEOGRAPHICAL DISTRIBUTION OF STUDENTS, SESSION 1970–71

	Under-graduates	*Post-graduates*	*Totals*
UNITED KINGDOM	3,257	1,191	4,448
BRITISH COMMONWEALTH OF NATIONS			
Australia	4	34	38
Canada	7	57	64
Ceylon	5	14	19
Cyprus	10	11	21
Hong Kong	19	13	32
India	13	29	42
Kenya	10	4	14
Malaysia	20	3	23
Nigeria	9	15	24
Pakistan	1	22	23
16 other countries	27	31	58
OTHER PARTS OF THE WORLD			
Brazil	3	7	10
Egypt	9	1	10
France	23	7	30
Greece	10	45	55
Iran	9	9	18
Iraq	5	12	17
Israel	5	10	15
Japan	7	6	13
South Africa	6	9	15
Spain	4	7	11
Sudan	0	13	13
Turkey	10	12	22
U.S.A.	87	69	156
Venezuela	5	8	13
West Germany	23	11	34
43 other countries (including 1 Stateless undergraduate)	67	57	124
	3,655	1,707	5,362

SUMMARY

United Kingdom	4,448
British Commonwealth of Nations	358
Other parts of the world	556
	5,362

APPENDIX VIII

ADMISSION OF FIRST DEGREE AND FIRST DIPLOMA STUDENTS SESSION 1970–71

FACULTY OF ARTS	*Students admitted October* 1970
B.A. Honours	
Anthropology & Linguistics	5
Archaeology	2
Classics	13
English	34
English & History of Art	2
English & Linguistics	3
French	26
French & History of Art	3
French & Linguistics	1
French & Philosophy	2
Geography	32
German	20
German & History of Art	1
German & Linguistics	4
German & Swedish	2
Hebrew & Jewish Studies	13
History, Ancient, Medieval & Modern	43
History & History of Art	2
Italian	12
Italian & History of Art	1
Latin	2
Modern Iberian & Latin American Regional Studies	9
Philosophy	24
Philosophy & History of Art	1
Scandinavian Studies	12
	269
B.Sc. (Econ.)	60
University Diploma in Fine Arts	17

	Students admitted October 1970
FACULTY OF SCIENCE	
B.Sc. Degree	
Anthropology	23
Astronomy	23
Biochemistry	22
Biological Sciences	9
Botany & Microbiology	34
Chemistry	62
Chemistry & Physics	4
Geography	34
Geology	20
Mathematics	49
Pharmacology	5
Physics	33
Physics (Applied)	7
Physiology	8
Psychology	39
Statistics	12
Zoology & Comparative Anatomy	15
	399
FACULTY OF LAWS	
LL.B.	98
B.Sc. in International Relations	18
	116
FACULTY OF ENGINEERING	
B.Sc. (Eng.)	
Civil & Municipal Engineering	22
Electronic & Electrical Engineering	30
Mechanical Engineering	25
B.Sc. (Eng.) in Chemical Engineering	39
	116
FACULTY OF MEDICAL SCIENCES	
2nd M.B.	108
2nd B.D.S.	50
	158
FACULTY OF ENVIRONMENTAL STUDIES	
B.Sc. Degree in Architecture, Planning, and Building	53
Total	1,188

APPENDIX IX

UNIVERSITY FIRST DEGREE AND DIPLOMA AWARDS

1 OCTOBER 1970—30 SEPTEMBER 1971

FACULTY OF ARTS

B.A. Honours	*1st Class Honours*	*2nd Class Honours*		*3rd Class Honours*	*Pass*	*Total*
		Upper Div.	*Lower Div.*			
Classics	2	5	4	1	—	12
English	5	7	13	6	1	32
French	3*	13	13	2	—	31
German	4	9	2	1	1	17
Hebrew	—	3	—	1	—	4
Hebrew Literature and Jewish History	1	—	1	1	—	3
Jewish History	—	—	1	—	—	1
History	2	28	8	—	—	38
Italian	—	3	3	2	—	8
Latin	1	1	1	—	—	3
Modern Iberian and Latin-American Regional Studies	1	3	1	2	—	7
Philosophy	3	10	4	1	—	18
Scandinavian Languages	1	1	2	1	—	5
Anthropology and Linguistics	—	1	—	—	—	1
English and History of Art	—	1	3	—	—	4
French and History of Art	—	1	—	1	—	2
German and History of Art	—	3	—	—	—	3
Philosophy and History of Art	—	—	2	—	—	2
German and Norwegian	—	1	—	—	—	1
Akkadian and Hebrew	—	—	—	1	—	1
Hebrew and Egyptian	—	1	—	—	—	1
Philosophy and Economics	—	1	1	—	—	2
	23	92	60	20	2	197

B.A. (Aegrotat)	*Pass*	*Total*
Classics	1	1

University Diploma in Fine Art: 25 students passed.

*Includes one external student

FACULTY OF LAWS

	1st Class Honours	2nd Class Honours Upper Div.	2nd Class Honours Lower Div.	3rd Class Honours	Pass	Total
LL.B.	3	20	49	19	14	105

FACULTY OF SCIENCE

B.Sc. Degree	1st Class Honours	2nd Class Honours Upper Div.	2nd Class Honours Lower Div.	3rd Class Honours	Pass	Total
Anatomy	5	7	1	—	—	13
Anthropology	—	8	6	2	—	16
Astronomy	1	1	3	—	—	5
Biochemistry	6	6	12	2	—	26
Botany	—	3	1	2	—	6
Chemistry	4	17	16	11	11	59
Combined Science	—	—	—	—	1	1
Genetics	—	1	3	—	—	4
Geography	4	33	24	3	—	64
Geology	1	2	5	6	—	14
Information Science	—	1	1	1	—	3
Mathematics	10	4	20	18	3	55
Microbiology	3	10	3	—	—	16
Pharmacology	2	9	2	—	—	13
Physics	9	8	14	6	10	47
Physiology	5	7	4	—	—	16
Psychology	3	14	9	2	1	29
Statistics	2	2	7	7	2	20
Zoology	1	3	9	2	1	16
	56	136	140	62	29	423

B.Sc. in Architecture, Planning and Building	1st Class Honours	2nd Class Honours Upper Div.	2nd Class Honours Lower Div.	3rd Class Honours	Pass	Total
	1	10	14	13	3	41

FACULTY OF ENGINEERING

	1st Class Honours	2nd Class Honours Upper Div.	2nd Class Honours Lower Div.	3rd Class Honours	Pass	Total
B.Sc. (Engineering)	9	14	16	12	8	59
B.Sc. (Engineering) in Chemical Engineering	2	6	10	4	5	27

FACULTY OF ECONOMICS

	1st Class Honours	*2nd Class Honours*		*3rd Class Honours*	*Pass*	*Total*
		Upper Div.	*Lower Div.*			
B.Sc. (Economics)	1	17	29	7	1	55
B.Sc. (Economics) (Aegrotat)	—	—	—	—	1	1
B.Sc. in International Relations	1	4	6	—	—	11

FACULTY OF MEDICINE

Second Examination for Medical Degrees: 102 students passed.

Second Examination for Dental Degrees: 44 students passed.

APPENDIX X

UNIVERSITY HIGHER DEGREE AND HIGHER DIPLOMA AWARDS

1 OCTOBER 1970—30 SEPTEMBER 1971

FACULTY OF ARTS

Ph.D. *Archaeology:* T. Anagnostopoulou. *Architecture:* C. A. Jencks, D. A. Joiner. *Classics:* C. Stace, D. Tsekourakis. *English:* B. Coleman, R. F. Ilson, J. Pilling, W. G. Roebuck, J. H. Wolf. *French:* D. C. Cox. *Geography:* W. B. Griggs, Elizabeth Teather. *German:* Mary K. Flavell, Frances A. Hardy, ¶B. Thompson. *Hebrew and Jewish Studies:* §I. Jacobs. *History:* R. A. Bowler, Joan R. Kent, T. J. A. Le Goff, E. A. L. Whitcomb. *Philosophy:* S. A. Wahab. *Phonetics:* M. A. Beaken, Yuen Yuen A. Chan, R. W. Rieber, Margaret A. Robertson, J. C. Wells. *Psychology:* A. D. Lovie. [28]

M.Phil. *Anthropology:* P. H. Pollard, Juliet M. Powles. *English:* Lesley A. N. A. Agnew, P. G. Diamond, Rosemary J. Gould, G. H. W. Mouser, D. N. Robins. *Geography:* M. A. Jahn. *History:* J. J. N. McGurk. *Library, Archive and Information Studies:* P. Biswas. *Town Planning:* M. Balamir, P. C. Brown, Phyllis S. Clarke, J. C. Colby, J. E. Condliffe, Janet P. Cook, I. W. Currie, R. L. Erskine, Penelope A. Farquhar-Oliver, Elizabeth B. Furey, E. A. Jack, R. Mason, P. D. Monk, Christine M. Moore, Ines M. Newman, Shu-Yiu S. Tong, A. F. Wallis, D. Webber, D. Whitfield. *Philosophy:* R. G. Beresford-Evans, A. S. Collier, D. G. Mayers. *Scandinavian Studies:* R. S. Wills. [33]

M.A. *Architecture:* S. D. Buck, B. J. Marrows, Susan E. Rostas, N. G. Thomson. *Area Studies:* *A. G. Barnard, Sarah A. Batchelor, G. A. Comber, C. J. Dean, W. H. Dowswell, Anita J. Ellis, *I. S. Farrington, T. R. Gillman, Juliet M. Hardy, Rosa J. S. Marazzi, E. P. Phillips, D. J. Seltzer, Teresa Thomas, G. Thorne, P. E. Walton, D. D. Wendel. *English:* M. I. S. Black, Patricia J. Hubble, G. P. Matthews. *German:* Margaret R. G. Jones, Muriel M. Jones, Pamela R. Munro, W. H. W. Prandzioch. *History:* M. R. G. Andrew, Claire M. Ferencik, *Mary B. M. Keegan, Michele F. Sullivan. *Library and Information Studies:* Sheila M. Apted, Maidel K. Cason, E. V. Corbett, J. Davies, *J. A. Dearden, Madeleine J. De La Haye, R. G. Hewitt, B. P.-K. Kwan, S. M. Made, Ann H. Schabas, G. White. [42]

University Postgraduate Diplomas: Archive Administration, 1; Archive Studies, 15†; Classical Archaeology, 1*; Egyptology, 2; Fine Art, 25; Library and Information Studies, 41‡; Psychology, 10; Social Anthropology, 5; Town Planning, 14†. [114]

*Awarded a mark of distinction. †2 candidates awarded mark of distinction. ‡4 candidates awarded mark of distinction. §Also registered at another Institution. ¶External student.

FACULTY OF ECONOMICS

D.Sc. J. W. Burton. [1]

Ph.D. *Economics:* N. Garganas. *International Relations:* G. A. Algosaibi, F. Parkinson. [3]

M.Sc. (Econ.) S. M. Salim. [1]

M.Sc. *Economics:* J. Mark, Vasiliki Papandreou, S. K. Reeves, P. J. Reynolds, L. C. Varnavides. *International Relations:* W. Bruinsma, Elaine M. Clark, J. H. Corson, P. J. Dass, K. J. McCormack, Vicky Mihali, Angela M. Penrose. *Planning Studies:* J. R. T. Eve, B. R. Hamill, R. J. Herne, T. E. Knight, P. Vass, M. C. Von Haag, K. A. West. [19]

FACULTY OF LAWS

Ph.D. Jadesula O. Akande, E. Asomugha, Y. M. Bakheit, B. A. Brobbey, S. O. Fashokun, D. Johnson, J. A. Omotola, P. E. Uchegbu. [8]

M.Phil. K. N. S. Counter, M. A. L. A. Hassoun. [2]

LL.M. (Old Regs.) H. M. G. Concannon, J. H. Farrar, †‡W. H. Kio Lawson. [3]

LL.M. (New Regs.) Y. Abdelrahman, V. O. Achimu, P. K. Alcock, P. J. H. Allen, J. M. Anderson, A. Babalis, J. R. Birds, B. C. Bozimo, L. J. Chimango-Lefani, O. E. C. Chirwa, R. J. Coventry, L. L. Cumberbatch, A. L. Erickson, R. K. Gardiner, D. P. Georgakopoulos, J. B. Gorman, L. D. Greenidge, Zofia B. Grochowska, C. Harvey, O. E. F. Hassan, I. O. Hayble, R. M. Hill, A. W. L. Hopper, W. J. Kearney, *N. A. Krott, G. A. Lacoste, J. A. Lester, Jacqueline C. Levy, J. F. Ley, M. T. Los, J. Machuca Vela, Dora J. Mirwitch, E. A. Mitrelias, C. A. Mollatt, Zahira H. Off, R. Ombres, N. Papazoys, A. B. Pengiran Abas, C. Rosenstein-Rozakis, J. G. Ross, C. J. Rowlands, H. R. Shupak, Tin Ohn, J. Walters, B. W. Wilkinson, L. A. Wolf-Phillips, A. M. Wright, M. Z. Yasin, A. E. Zervoyannis. [49]

University Postgraduate Diplomas: Law, 2; Shipping Law, 19. [21]

FACULTY OF SCIENCE

D.Sc. H. M. Hoffmann, D. G. Larman, P. K. Thomas, M. L. E. Tobe, K. Vickerman. [5]

Ph.D. *Anatomy and Embryology:* A. I. Matus, R. L. Tresman. *Animal Genetics:* A. P. Beranek, Monica J. Trigg. *Astronomy:* R. J. M. Bennett. *Biochemistry:* B. H. Anderton, P. M. Beard, G. S. Challand, Gillian M. Skutsch. *Botany and Microbiology:* M. C. Boulter, M. S. Grewal, Jane C. Heydecker, †Anthea R. Hughes, D. C. B. Teather, R. H. Wilson. *Chemistry:* Valerie M. Anderson, M. A. Baldwin, C. S. Baxter, B. V. Charlwood, Katharine A. Charlwood, B. N. Cockburn,

*Awarded a mark of distinction. †Also registered at another Institution. ‡External student.

R. C. Cottrell, R. J. H. Cowles, D. Emerson, †S. J. Formosinho Sanches Simoes, D. I. Hall, †J. M. Harris, A. B. Holmes, †D. R. Kemp, G. F. P. Kernaghan, Kathryn A. Knapp, G. J. Lewis, J. H. Ling, J. Mann, F. L. Pearce, G. L. P. Randall, P. J. Smith, R. H. Smithers, R. Tudor, B. L. Vickery, M. D. Vinnicombe, K. S. Webb, T. R. Welberry, June G. Winter. *Civil and Municipal Engineering:* R. E. Allsop. *Geography:* M. J. F. Brown, E. C. Penning-Rowsell, M. J. Taylor. *Geology:* R. G. Dingwall, C. Halls. *History and Philosophy of Science:* F. Greenaway. *Human Genetics and Biometry:* Lynda J. Donald. *Mathematics:* B. H. Browne, R. W. Clark, R. J. Cook, R. A. Holmes. *Pharmacology:* D. G. Haylett. *Physics:* P. C. Barber, J. A. Belling, M. Brocklehurst, G. R. Courts, N. S. Craigie, G. V. Guy, P. W. Hempson, S. M. Iqbal, D. E. Knight, M. R. Mahdavi, G. D. Lempert, D. T. Miller, H. C. Morris, D. W. Norcross, Hannelore E. Saraph, A. D. Smith, G. D. Thompson, Adrienne F. Timothy, J. G. Timothy, M. M. Yussouf. *Physiology:* A. C. Darke, Jean A. Ennever, K. M. Kretzschmar, B. B. Lee, B. Lynn, H. C. B. Richardson. *Psychology:* N. B. Johnson. *Statistics:* P. J. Brown. *Zoology and Comparative Anatomy:* Hilary R. Anderson, J. R. Downie, C. F. Herbert, Janet E. Hornby, V. Jaccarini. [90]

M.Phil. *Anthropology:* K. W. Nicklin. *Botany and Microbiology:* Joan E. Boyle. *Mathematics:* G. K. Kolocassides. *Physics:* P. Hyson, V. G. Shaw. *Psychology:* †R. T. G. Morgan. [6]

M.Sc. *Architecture:* Helena Blomanova, G. F. Browning, T. J. Fanstone, P. G. K. Fernando, Robin S. Goldman, R. Holmes, P. T. Jewkes, H. C. R. John, R. F. Jowett, Gloria Lozano-Barcala, M. McCafferty, R. J. L. Stewart, D. L. Usiskin, F. J. Wilton. *Biochemical Engineering:* K. E. Daugaard, N. L. Hansen, M. J. Meyer, P. C. Painter. *Biochemistry:* D. N. Currie, Jane R. Hammond, E. Y. Morrison. *Conservation:* J. L. Anderson, Shirley A. Bray, *D. I. Brotherton, G. A. Foster, Hilary L. Kitcat, Hazel J. Penfold, Annabel M. Sturges, Janet E. Towler, R. P. R. Warner, G. L. Wills. *Geography:* A. N. Ngala, C. J. Sale. *History and Philosophy of Science:* D. K. Leitch, M. H. Mayer, D. M. Richards, J. W. N. Salmon, Patricia B. Smart, B. C. Southgate, A. A. Tulley, D. L. P. Williams, G. F. Williams. *Hydrogeology:* R. S. Abell, F. D. S. Al-Sawaf, M. A. H. Alvi, J. L. Bassier, R. B. Bradford, A. N. Charalambous, J. R. Christmas, B. J. Connorton, A. L. D'Aguilar, D. Daneshvar, L. H. Dowse, M. J. Jones, W. A. Milne-Home, G. E. Oteze, M. Price, R. B. Salama, S. A. S. Sayed. *Marine Earth Science:* P. Bishop, D. G. R. Goold, A. L. Kidd. *Micropalaeontology:* Carolyn A. Gosling, I. M. Henderson, D. J. Shipp, Carol A. Walker. *Statistics:* C.-K. Leung. *Physiology:* H. Bostock, J. O. Dostrovsky, C. L. Mollel, M. R. C. Winter. [71]

*Awarded a mark of distinction. †Also registered at another Institution.

FACULTY OF ENGINEERING

Ph.D. *Chemical:* A. J. Agbim, D. J. Everett, R. Lee Kwok-Yuen, Whang Sun Tze. *Civil and Municipal:* A. K. Blunden, R. A. Chapman, R. V. Dhond, P. E. Hale, B. Hayman, G. W. Hunt, †J. G. Hunt, B. K. Menzies. *Electronic and Electrical:* J. M. Bullingham, O. J. Davies, P. A. V. Hall, A. J. Hissink, M. Michaelidis, J. K. Thomson, P. K. Yu. *Mechanical:* A. K. Agarwal, T. D. Angelidis, L. Gajdos, R. E. Lee, K. Prasad, K. Silapabanleng. *Photogrammetry and Surveying:* M. M. Radwan. [26]

M.Sc. *Biochemical Engineering:* H. T. Beresford, J. F. Christensen, R. J. Davies, *A. E. Loftus, B. K. Manston, Tseng Choo Sin, P. A. Young. *Ergonomics:* L. E. Gorrell. *Microwaves and Quantum Electronics:* A. S. Bains, A. Caple, B. J. Dansie, C. D'Sa, G. A. Heathcote, R. Hodjati, I. S. Hudiara, J. T. Liew, I. Mansur, E. J. Murillas Sandoval, *P. Nagenthiram, H. S. Ramaprasad, S. R. Rao, A. G. Stacey. *Naval Architecture:* R. I. Jackson, T. King, J. A. Knox, P. D. Marshall, *L. Shepherd, B. Simmons. *Surveying:* M. H. B. Jensen, J. P. Webb. [30]

FACULTY OF MEDICINE

Ph.D. *Zoology and Comparative Anatomy:* †J. A. Wyke. [1]

*Awarded a mark of distinction. †Also registered at another Institution.

COLLEGE DIPLOMA AND CERTIFICATE AWARDS
1 OCTOBER 1970—30 SEPTEMBER 1971

FACULTY OF ARTS

Diploma in Film Studies: Nicholas John Agnew*; Nancy Karol Kulik*; William John Gilmour Pidgeon. [3]

Certificate of Proficiency in Phonetics: Paul Pierre Marie André Alix; Annie Germaine Geneviève Barbazan; Winifed Marion Bennett; Krystyna Maria Biskupski; Christine Burden; Cataldo Louis Cammarata; Yolanda Gloria Cantú; Rosie Chan Fong-Lam; Carmel Mary Coonan; Patrice Honoré Coronel; Maria Giovanna D'Andrea; Abdulla Mustafa Dannan; Margaret Donnellan; Louisa Mary Emerson; Sylvia Anne Gibson; Claus Gnutzmann; Margaret Anne Godley; Yvonne Mary Graham; Hans Wilhelm Heck; Christine Jacquest; Seiki Kamagata; Marisa Adele King; Jean-Pierre Labaste; John Patrick Magrath; Mirella Oppici; Lynda Susan Osborn; Christian Ostern; Sharon Judith Page; Frances Anne Penketh; Christine Valerie Pennison; Nelly Pérennès; Lynne Frances Power; Manuel Rios; Chantal Robic; Mary Therese Roche; Gabriele Seget; Richard Norman Skinner; Grace Rosina Mary Southgate; Yolanda Stinson; Maria Jolanta Thomas; Donald Watson; Frances Bridget Webb; Joy Webster. [43]

Diploma in Urban Studies (Developing Countries): Mohammad Khorshed Alam; Jagdish Prasad Bhargava; Mario Patricio Durandeau; Debakumar Dutta-Mazumder; Emmanuel Effah; Gitti Etemad; Marta Lidia Knallinsky; Man-Pan Lok; Santi-Ranjan Mukherjee; Tarlok Singh Punn; Muhammad Anwar Raee; Aravind Ramachandra Rajapurohit; Agustin Pablo Romero Zaffaroni; Edith Aida Soubie; Federico Torres Arroyo.* [15]

FACULTY OF LAWS

Certificate in English and American Law: Thomas Leslie Bodnar; Andrew Thomas Brasno; James Michael Crowley; James Joseph Cunningham; Robert James Gaughran; John Gregory Hund; Raymond Terence Kalina; John Robert Koch; Raymond Edward Lambert; Mark Robert Lindenmeyer; Erin McDonnell; Lawrence Fidel Meyer; John Francis Mezzanotte; Coleman O'Brien; Paul Robert Onuska; Marcia Irene Pearce; Michael Carl Schaefer; Charles Edward Shaffer; Richard Lee Swartz; Joseph John Van Jura. [20]

FACULTY OF SCIENCE

Diploma in Hydrogeology: Robert Sebastian Abell; Fakhri Daood Saleem Al-Sawaf; Athar Hussain Alvi; John Lancelot Bassier; Richard Bowyer Bradford; Andreas Nicou Charalambous; Joseph Reginald Christmas; Brian John Connorton; Alsworth Latty Daguilar; Daryoush Daneshvar; Leslie Harold Dowse; Michael John Jones; Bashir Ahmed Memon; William

*Awarded with Distinction.

Alexander Milne-Home; Gabriel Ebosele Oteze; George Trevor Keith Pitman; Michael Price; Ramsis Boulis Salama; Shabbir Ali Shah Sayed. [19]

Diploma in Micropalaeontology: Lynn Olive Allen; Richard Andrew Keith Attewell; Carolyn Ann Gosling; Ian Montgomery Henderson; Robert William Meyrick; David John Shipp; Ahmed Fadel Ayad Tmalla; Carol Ann Walker. [8]

Diploma in Space Science: Ross Alan Henderson; Peter Michael Molton. [2]

Diploma in Statistics: Alan Newton Bates; Christopher John Dyer; Laurence Stuart Freedman*; Juliet Margaret Hampton; Patrick Robert Hogley; Stephen Horsfield*; Lynn Carol Hulme; Graham Charles Jones; Martyn Norman Jones; Joseph Peter Kahan; Mohamed Ahmed Sesay Koker; John Denis Ludbrook; John Parker; Pambis-Michael Philippides; Syed Muzaffar Rizvi; Peter Smith; Jill Talbot; Ashley Greville Tebbutt; Roger Charles Thornton; Keith Tong; Janet Frances Turner; Dorothy Caroline Veale. [22]

FACULTY OF ENGINEERING

Diploma in Biochemical Engineering: Henry Thomas Beresford; Arthur Blinkhorn; Jacob Forum Christensen; Knud Erik Daugaard; Robert Julien Davies; Niels Laurits Hansen; Anthony Edward Loftus; Brian Kenneth Manston; Michael John Meyer; Paul Charles Painter; Tseng Choo Sin; Paul Anthony Young. [12]

Diploma in Chemical Engineering: William Roderick McKenzie Allan; Robin Barton Custance Baker; Geoffrey Dixon; Timothy Frederick Forth; Don Nalin Gunasekera; Anthony Isaac; Gregory Mends Lewis; Charles Morrison; Russell Vaughan; Philip Norman Wardle. [10]

Diploma in Microwave Engineering: Abdul Haq Abdul-Jabbar Al-Ani; Mohsen Arbabi; Amarjit Singh Bains; Dhiraj Bhagat; Malcolm David Byars; Cedric D'Sa; Geoffrey Alec Heathcote; John Tonny Liew; Israel Mansur; Dimitrios Markopoulos; Israr Muhammad; Joseph Mun; Eberth Jesus Murillas Sandoval; Padmanabha Nagenthiram; Chuka Onyemaechi Godwin Oeah; Oguz Özkan; Rajkumar Atmaram Punwani; Holavanahalli Srinivasaiengar Ramaprasad; Arthur Glyn Stacey; Reinhard Lothar Wierich; William Alun Wyn-Jones. [21]

Diploma in Naval Architecture: Roger Ian Jackson; Thomas King; John Armour Knox; Paul David Marshall; Leslie Shepherd; Barry Simmons. [6]

Diploma in Photogrammetry: Pratap Shivabhai Amin; Bernard Julian Cox; Michael Guthrie Forbes; Anthony Peter Johnson Savage; Howard Turner; Keith Stuart Wilson; Roy Stephen Wood. [7]

Diploma in Surveying: Perumbuli Achchice Ariyaratne; Kok Siong Chan; Ambalavanar Shanmuganathan; Kamburugamuwe Loku Acharige Ranasinghe Silva; Indrajith Dharmapriya Wijayaratne. [5]

*Awarded with Distinction.

Diploma in Architecture: Lindsey Ellen Baird; Andrew David Borley; Elizabeth Christine Brooks; David John Clarke; Nigel Broadhurst Clarke; Harriet Elisabeth Edgerley; David Frank Gibson; Mark Girouard; Jeremy Peter Sharrocks Greenhalgh; Nicholas Hare; Ralph Michael Harris; Richard Hines; Mary-Jean Hunter; William Storrs Lee; Kristan Marie Sinclair Livingston; Stuart John Mackrell; Peter Major; Janet Suzanne Mitchell; Stephen John Murray; Donald Francis Needham; Bao-Tri Nguyen-Phuoc; Richard Rollo Ronald; John Nicol Saad; Celia Maxwell Scott; Robert Shaw; Richard Shepley; Roger John Simpson; Richard Culver Smith; Alice Rachel Taylor; Hilary David Taylor; Gary Marshall Vince; Graham Vincent Welch. [32]

Certificate in Town Planning: Alan Andrew Black; Falkner William Rudd Carson; Michael James Coupe; Kalyan Kumar De; Sheila Farrell; Roger Edis Foreman; Geoffrey Hunt Gribble; Michael Colin Gwilliam; David Alan Jeater; George Walter Jelinek; Brian Dewar Morton; Shirley Constance Owen; John Howard Rawlings; Derek William Rogers; Sydney Roper; Christopher David Thomas; Jutta Von Gavel. [17]

SCHOLARSHIPS, STUDENTSHIPS, AND PRIZES

COLLEGE AND UNIVERSITY AWARDS

COLLEGE AWARDS

Anatomy Prizes—Medical: A. B. Grossman. *Dental:* Jacqueline D. Orchard.

Charlotte Ashby Prize (*Laws*).—A. J. Patterson.

Sarah M. Baker Memorial Prize (*Botany*).—Philippa J. Kaplan.

Herbert Batsford Prize (*Architecture*).—Elaine A. Burrows.

Thomas Witherden Batt Scholarships (*Science*).—K. G. R. Allen; W. Allison; Linda Gower; M. J. Morrey; S. E. V. Phillips.

Leonard Bayliss Memorial Prize (*Physiology*).—Fionna P. Moore.

Francis Perch Bedford Prize (*Zoology*).—P. L. Stern.

Bonney Prize (*Geology*).—R. Hall.

Broderick-Parry Prize (*Geography*).—C. M. Rogerson.

The Chadwick Medal and Prize (*Civil Engineering*).—M. D. Casey.

Churchill-Jenkinson Prize (*Archive Administration*).—Margaret L. Woodhead.

Clinton Prize (*Electrical Engineering*).—P. C. A. Wong.

Cluff Memorial Prize (*Medal*).—A. B. Grossman.

Dawes Hicks Scholarships in Philosophy.—S. T. Sommerville.

Donaldson Medal (*Architecture*).—M. J. Elliott.

Early English Text Society's Prize.—J. W. Lewis.

Esso Chemical Travelling Scholarship (*Chemical Engineering*).—R. V. Longman.

Fantham Memorial Research Scholarship (*Zoology*).—C. Heller (1 term).

Richard FitzGerald Prize (*Engineering*).—D. Ingham.

Sir Banister Fletcher Prize and Medal (*Architecture*).—D. J. Clarke.

Flinders Petrie Scholarship in Egyptian Archaeology.—Carol D. Bufton.

Foyle Prize (*Latin*).—D. J. R. Williams.

Stephen Glanville Memorial Scholarship (*Egyptology*).—A. A-R. H. El Khouli.

Eva Grunwald Memorial Prize (*French*).—Christine V. Pennison.

Violet Hall Prize (*French*).—Yvonne Y-W. Liang.

Hart Prize (*Photogrammetry*).—R. S. Wood.

Archibald P. Head Memorial Medal and Prize (*Mechanical Engineering*).—J. Kubie; B-M. Nurali.

Heimann Medal (*German*).—Ingrid G. C. Griffiths.

T. G. Hill Scholarships (*Botany*).—A. J. Davy; D. J. Linstead.

Elsie Hitchcock Prize (*English*).—A. J. Miles.

Hollier Scholarships in Greek.—C. Markopoulos; D. N. Sedley.

R. B. Hounsfield Scholarship in Traffic Engineering.—D. M. Branston.

R. B. Hounsfield Prize in Traffic Engineering.—B. W. Summers.

R. B. Hounsfield Prize in Town Planning and Civic Engineering.—J. H. Rawlings.

Hurst Prize in English Law.—Jacqueline S. West.

Institution of Civil Engineers' Prize.—J. Agha Jaffar.

Institution of Electrical Engineers' Prize.—Teh Ghee Ann.

Jackson Lewis Scholarships.—Katherine Edge; A. G. Jones.

Sir Hilary Jenkinson Scholarships in Archive Administration.—Jean M. Cockayne; Judith Phillips.

Jolowicz Prize (*Roman Law*).—Melinda S. Collins and R. J. Price, prize equally divided.

Ker Memorial Prize (*English*).—Jacqueline Y. Garrett and Miranda Tufnell, prize equally divided.

Kitson Prize (*Chemical Engineering*).—S. J. Irving.

Sir John MacAlister Medal (*Librarianship*).—Christina A. Mackwell.

Malden Scholarship (*Greek*).—M. J. Smith.

Sir William Meyer Prize (*Geography*).—S. A. G. Jones.

Sir William Meyer Prize (*History*).—K. E. Hunter.

Sir William Meyer Travelling Studentships (*History*).—Carolyn A. Baxter, S. T. Calloway; Mary E. J. Chadwick; Monica Davies; R. W. Gallagher; Adrienne Morgan.

John Stuart Mill Scholarship in Philosophy of Mind and Logic.—S. T. Sommerville.

Momber Scholarship in Physics.—A. G. Michette.

Rosa Morison Scholarships in English Language and Literature.—Yvonne A. Evans; Jennifer A. Shackleton.

Morley Medal (*Modern English Literature*).—Charlotte P. M. Boydell.

Morris Prize (*Geology*).—R. M. Knight.

Douglas Murray Prize (*Egyptology*).—P. V. Johnson.

Oliver Scholarship in Botany.—D. A. Coates.

Owings Travelling Scholarship (*Environmental Studies*).—M. J. Spragg.

Physiology Prizes—Medical: A. B. Grossman. *Dental:* W. A. D. Foster and Jacqueline D. Orchard, prize equally divided.

Platt Prizes (*Greek*).—Marlene A. Nelson; D. E. Passingham.

Theodora Prankerd Memorial Scholarship in Botany.—Phyllis G. A. Willshaw.

Ramsay Memorial Medal (*Chemistry*).—A. G. Knapp.

Ellen Richards Prize (*Botany*).—Philippa J. Kaplan.

Graham Robertson Travelling Scholarship (*Fine Art*).—G. Levantis and M. R. Walsh, Scholarship equally divided.

Robert Ross Scholarship in Fine Art.—T. M. O'Neill.

Schafer Prize in Physiology.—R. C. Woledge.

Sharpey Physiological Scholarship.—K. M. Kretzschmar.

Slade Scholarship (*Fine Art*).—P. Hammond.

Stevenson Prize (*Applied Mathematics*).—J. S. Halberstadt.

Suckling Memorial Prize (*Practical Anatomy*).—Janet A. Hope.

Sully Scholarship (*Psychology*).—M. G. Smith.

Sir Andrew Taylor Prize in Architecture.—S. J. Mackrell.

Taylor Woodrow Travelling Scholarship (*Civil Engineering*).—C. Perry.

Tuffnell Scholarship (*Chemistry*).—G. J. Hughes.

L. F. Vernon-Harcourt Prize (*Civil Engineering*).—A. P. Hill.

Ellen Watson Memorial Scholarship in Applied Mathematics.—E. W. Davies and D. E. Turner, Scholarship equally divided.

FACULTY MEDALS AND PRIZES

Arts: Rosa Morison Medals and Prizes.—C. S. Ferns; J. T. Fitzgibbon.

Laws: Andrews Medal and Prize.—P. J. Wilkinson.

Science Medals.—Angela J. Cook; N. J. Dodd; R. S. Ellis; M. K. Franks; R. J. Gardner; R. Hall; J. N. Leonard; B. Levanthal; Margaret A. Mace; A. G. Michette; A. G. W. Norden; C. M. Rogerson; P. L. Stern; R. G. Totman.

Engineering: Goldsmid Medal and Prize.—J. Kubie.

SESSIONAL PRIZES

Anthropology: Rosa Morison Prize.—J. Urry.

English: Campbell Clarke Scholarship.—(1) Jacqueline Y. Garrett. (2) Miranda Tufnell. *West Scholarship.*—M. Oxenius.

French: Rosa Morison Prizes.—(1) Yasmin Ahmed. (2) A. R. Burt. (3) Lynda S. Osborn.

Geography: College Prize.—Patricia S. Morgan. *Maconochie Prize.*—D. A. Holmes. *1903 Prize.*—B. Morse.

German: Robertson Prize.—Sarah A. O'Brien Twohig. *Willoughby Prize.*—Heidi H. Robinson.

Greek: Long Prize.—Alexandra A. Thompson and Heather White, prize equally divided.

History: Dolley Prize.—C. J. Bradey and R. Maynard, prize equally divided. *Pollard Prize.*—G. J. Edwards. *West Prize.*—E. R. L. Davies and Adrienne Morgan, prize equally divided.

Italian: Sir Anthony Panizzi Prize.—Kristyna M. Biskupski and Christine V. Pennison, prize equally divided.

Latin: Key Prize.—L. W. Catlow and Caroline C. Russell, prize equally divided.

Scandinavian Studies: Rosa Morison Prize.—R. D. S. Allen.

Laws: Andrews Prizes.—(1) Jacqueline S. West. (2) A. E. Marnoch. (3) G. Dinnoodie. (4) D. A. Hardstaff. (5) Jennifer P. Meiss.

Astronomy: Huggins Prize.—G. A. Radford.

Biochemistry: Jack Drummond Prize.—V. J. Miles. *Plimmer Prize.*—G. Parry.

Botany: Darwin Prize.—E. V. J. Tanner. *Robert Hooke Prize.*—Cheryl E. J. Wallis.

Chemistry: C. K. Ingold Prizes.—(1) G. P. Harper. (2) I. R. Harper. (3) A. V. Stealey.

Geology: Chubb Prize.—A. J. Burrows.

Mathematics: Filon Prize.—Marilyn Barrett. *Hill Prize.*—H. L. Davies. *Jeffery Prize.*—Marilyn Barrett.

Physics: William Bragg Prize.—J. A. Davies and Janet A. Spooner, prize equally divided. *Oliver Lodge Prize.*—A. R. G. Jackson. *Wood Prize.*—N. P. Simons.

Physiology: Foster Prize.—R. K. Ball. *Sanderson Prize.*—Susan E. Smith.

Psychology: McDougall Prize.—Helen B. Tager. *Spearman Prize.*—Deena C. Segal.

Statistics: Egon Pearson Prize.—G. A. Bancroft. *Karl Pearson Prize.*—R. C. Dodson and P. Rhodes, prize equally divided.

Zoology: (1) C. A. Slaughter. (2) Sandra D. Barlow.

Civil and Municipal Engineering: Goldsmid Prizes.—(1) P. W. J. Raven. (2) K. A. Barnett.

Mechanical Engineering: Goldsmid Prizes.—(1) T. J. Cook. (2) A. R. McIntosh.

Electronic and Electrical Engineering: Goldsmid Prizes.—(1) R. B. Doshi. (2) R. A. Yates.

Chemical Engineering: Goldsmid Prizes.—(1) Lee Chee Fook. (2) R. V. Longman.

UNIVERSITY AWARDS

UNIVERSITY POSTGRADUATE (FINALS) STUDENTSHIPS

Biochemistry: T. E. Sensky. *Electronic and Electrical Engineering:* Teh Ghee Ann. *Mathematics:* R. J. Gardner (moiety of Sherbrooke Studentship). *Mechanical Engineering:* Wong Pun Chiu.

UNIVERSITY POSTGRADUATE STUDENTSHIPS

Botany: Annabel M. Coker (D. T. Gwynne-Vaughan Studentship). *Ecology:* P. F. Randerson. *English:* Yvonne A. Evans (Stopford Brooke Studentship). *Italian:* Enid T. Falaschi. *Philosophy:* Siranus O. Dermen.

UNIVERSITY POSTGRADUATE TRAVELLING STUDENTSHIP

History: M. J. T. Hoodless.

APPENDIX XIII

BENEFACTIONS, DONATIONS, RESEARCH GRANTS AND CONTRACTS

The College Committee makes grateful acknowledgment of the following:

AGRICULTURAL RESEARCH COUNCIL

(1) £2,009 for research in the Department of Botany and Microbiology on the control of carbon dioxide assimilation in photosynthesis.

(2) £1,839 for research in the Department of Botany and Microbiology on the intergeneric hybridisation between *Fragaria* and *Potentilla*.

ALLEN AND HANBURY LIMITED

£1,000 for laboratory expenses in the Department of Pharmacology.

THE ANSTRUTHER 1966 CANADA TRUST

£50 for the Library for preliminary expenses in connection with a scheme to enable extensive work to be carried out on the sorting and indexing of the Chadwick papers.

ARCHITECTS' REGISTRATION COUNCIL OF THE UNITED KINGDOM

£500 for the School of Environmental Studies towards the cost of the preparation for publication of research papers on architectural education.

THE ARTHRITIS AND RHEUMATISM COUNCIL

(1) £3,316 for research in the Department of Pharmacology on the chemical structure of LNPF.

(2) £1,100 for the Department of Pharmacology for permeability assays.

ARTS COUNCIL

£350 for the Library towards the cost of maintaining the specialist collection of Little Magazines published in this country and overseas.

DR M. ASHBY

A donation of £40 to supplement the income of the fund for the Charlotte Ashby Prize in the Faculty of Laws.

ASTHMA RESEARCH COUNCIL

£1,703 for research in the Department of Pharmacology on guinea-pig lung tissue during the process of passive sensitisation.

THE BANK OF ENGLAND

£17,927 for an investigation in the Department of Psychology of aspects of the design of banknotes.

BEECHAM GROUP LIMITED

£295 for the Department of Chemical Engineering for research related to the enzyme penicillin amidase.

Dr Julia Bell

A gift of £1,000 to the Library. Dr Julia Beli came to the College as Assistant to Professor Karl Pearson in 1908, and continued her research work in the Galton laboratory until 1965.

Emeritus Professor H. Hale Bellot (the late)

A further sum of £3,500, under the bequest of the late Professor Bellot, which is being used for the benefit of the American History library and to assist graduate students and younger members of the staff of the History Department to pursue research in the United States or in any other part of the western hemisphere.

The British Academy

(1) £5,204 for work in the Department of Greek on unpublished Oxyrhynchus Papyri.

(2) £4,000 for 1969–71 towards the cost of the production of a definitive edition of the works of Jeremy Bentham.

British Heart Foundation

£11,474 for the Department of Physiology for quantitative studies on single vessels in the micro circulation.

The British Petroleum Company Limited

(1) £3,000 in support of an established Chair in the Department of Chemical Engineering—Dr Mark Guter appointed.

(2) £150 for research in the Department of Geology on lower carboniferous miospores of the East Midlands of England.

(3) £70 for research in the Department of Geology on Permian evaporites in North-West England.

British Steel Corporation

£950 for the Department of Civil and Municipal Engineering for a survey into the design of thin sheet steel structures.

Mrs Lois Butler Charitable Trust

£2,000 per annum for three years for the School of Environmental Studies for the teaching of environmental subjects.

California Foundation for Biochemical Research

$1,500 for a studentship in the Department of Botany and Microbiology.

Calouste Gulbenkian Foundation, Lisbon

£12,000 for the Department of English Language and Literature for a survey of English usage.

Cancer Research Campaign

(1) £6,138 for research in the Department of Biochemistry on the effects of aflatoxins and other carcinogens on membrane polysome interactions *in vivo* and *in vitro*.

(2) £4,205 for research in the Department of Pharmacology on tumour immunology.

Centre for Environmental Studies

£3,857 for a study in the School of Environmental Studies of people's responses to alternative planning proposals.

Civil Service Department

£10,450 for the School of Environmental Studies for telecommunications field trials.

Clothing and Footwear Industry Training Board, Northern Ireland

£7,110 for research in the Department of Psychology on the recruitment, selection, and training of sewing machinists.

Department of Education and Science

£6,000 and £5,000 for the School of Library, Archive, and Information Studies for a special advanced course for teacher-librarians.

Department of Education and Science (Office for Scientific and Technical Information)

(1) £12,340 for the School of Library, Archive, and Information Studies for an evaluation of SDI services based on Compendex.

(2) £5,110 for the School of Library, Archive, and Information Studies for a theoretical study of the Bradford-Zipf Distribution.

Department of Employment

£225,000 for research in the Department of Psychology into the problems of industrial training.

Department of the Environment

(1) £500 for a pilot study in the Department of Civil and Municipal Engineering of methods of assignment and valuation of time savings.

(2) £19,178 for the School of Environmental Studies for a study of the building timetable.

Department of Health and Social Security

£5,700 and £300 for research in the Department of Mechanical Engineering on pneumatic position control servomechanisms for arm prostheses.

Emeritus Professor Thorold Dickinson

A gift to the College of forty-four films, some rare and valuable, which were acquired by Professor Dickinson during the period of his appointment at the Slade School of Fine Art. The collection will be known as the 'Dickinson Film Collection'.

Esso Exploration Inc.

£252 for research in the Department of Geology on micropalaeontology.

Esso Petroleum Company Limited

£2,250 for a research studentship in the Department of Chemical Engineering for a study in the general area of chemical reactions in fluidised beds.

THE FORD FOUNDATION (U.S.A.)

$15,000 for the Centre for Urban Studies to provide urban studies training for selected officials from developing countries.

FOUNDATIONS' FUND FOR RESEARCH IN PSYCHIATRY (U.S.A.)

$15,000 for research in the Department of Pharmacology on 'self-titration' of small doses of psychoactive drugs by psychiatric patients.

THE GAS COUNCIL

(1) £600 for the Department of Chemical Engineering for the purchase of equipment.

(2) £250 for research in the School of Environmental Studies in the field of thermal comfort.

GEIGY PHARMACEUTICALS

£600 for laboratory research expenses in the Department of Botany and Microbiology.

GEOLOGICAL SOCIETY OF LONDON

£200 for research in the Department of Geology on Mississippian Windsor evaporites in Nova Scotia. (Award of the Tyrell Fund for 1970 to Dr P. G. Llewellyn.)

MRS ELSIE B. HART

A gift of £500 from Mrs Hart, as an initial donation to provide a fund for the award of prizes in Photogrammetry and Surveying, to be known as the 'Hart Prizes', in memory of her late husband, Cecil Augustus Hart, sometime student and member of staff of the College, Professor of Surveying and Photogrammetry 1946–50, Fellow of the College; and a donation of £30 for the award for 1970–71.

HUMPHREYS AND GLASGOW LIMITED

£5,957 in support of an established Chair in the Department of Chemical Engineering—Dr Mark Guter appointed.

IMMANUEL CHARITABLE TRUST

£250 for the Department of Hebrew and Jewish Studies towards the cost of the publication of a journal.

IMPERIAL CANCER RESEARCH FUND

£22,500 for the Department of Zoology and Comparative Anatomy towards the provision of animal accommodation in the Immunology Unit.

INDUSTRIAL DISTRIBUTORS (SALES) LIMITED

£750 for the Department of Chemistry for research on diamonds.

INTERNATIONAL BUSINESS MACHINES

£1,150 for a fellowship in the Department of Physics.

INTERNATIONAL COUNCIL FOR PHILOSOPHY AND HUMANISTIC STUDIES

$800 for the Department of Greek for the creation of a photographic archive of Greek papyri.

International Union Against Cancer

$1,000 for the expenses of a visiting scientist in the Department of Human Genetics and Biometry.

The Leverhulme Trust Fund

(1) £1,637 and £136 for an Emeritus Fellowship in the Department of Electronic and Electrical Engineering.

(2) £12,000 for the Department of English Language and Literature for a survey of English usage.

(3) £649 18s. 3d. for a study in the School of Environmental Studies of the design processes and the method of education for design.

London Transport Executive

£2,992 for research in the Department of Psychology on the training of bus drivers and related matters.

Professor Lord Llewelyn-Davies

A gift of royalties of £153 to the Bartlett School Appeal Fund.

Medical Research Council

(1) £28,336 for a study in the Department of Anatomy and Embryology of the cerebral cortex, allergic neuritis, anaxonal myelination, and synaptic organisation.

(2) £23,204 for research in the Department of Anatomy and Embryology on the problems of hard tissue development and structure, physiological resorption, and pathological distribution.

(3) £7,890 for research in the Department of Anatomy and Embryology on the correlation between synaptic vesicle morphology and specific transmitters in brain.

(4) £4,247 for research in the Department of Anatomy and Embryology on mirror-image discrimination and interocular transfer.

(5) £2,652 for research in the Department of Anatomy and Embryology on the uptake of radio-active transmitter substances by brain tissue.

(6) £380 for the Department of Anatomy and Embryology for a project for developing a quantitative method for detecting the presence of aggressive factors in lymphocytes and serum in experimental immune conditions.

(7) £35 for equipment in the Department of Anthropology for use in connection with research on the reproduction and general behaviour of nocturnal prosimians.

(8) £23,626 and £188 for an investigation in the Department of Biochemistry of the biological and medical significance of the binding of polysomes to endoplasmic reticulum.

(9) £7,020 for research in the Department of Biochemistry on the antigenic lipopolysaccharide of *pseudomonas aeruginosa* in relation to antibiotic resistance of Habs type.

(10) £2,966 for research in the Department of Biochemistry on the structural and functional relationships of the DNA polymerases of mammalian cells.

(11) £1,546 for a study in the Department of Biochemistry of the structure of mutant amidase proteins.

(12) £4,343 for research in the Department of Biophysics on the mechanism of visual excitation.

(13) £9,941 for research in the Department of Botany and Microbiology on the characterisation, location, and function of proteins in pollen and their allergenicity to man.

(14) £19,905 and £100 for research in the Department of Chemistry on the conformation of molecules affecting nervous systems.

(15) £8,199 for research in the Department of Chemistry on the structure and packing of membrane components.

(16) £1,386 for research in the Department of Chemistry on the crystallisation of choline acetyltransferase.

(17) £5,945 for an investigation in the Department of Chemistry and the Department of Physiology of the role of carbohydrate moiety in the biological activity of nerve growth factors.

(18) £44,063 for the Department of Chemistry and University College Hospital Medical School for studies of pathological-type crystals.

(19) £4,845 for research in the Department of Human Genetics and Biometry on the culture of cells from amniotic fluid for chromosome analysis.

(20) £1,761 for the Department of Mechanical Engineering for an evaluation of the 'Hendon Arm'.

(21) £489 for research in the Department of Mechanical Engineering on portable energy supplies for powered prostheses.

(22) £7,581 for the Department of Pharmacology for various projects in biochemical pharmacology.

(23) £4,441 for the Department of Pharmacology for an analysis of drug dependence in rats.

(24) £680 for research in the Department of Pharmacology and the Department of Anatomy and Embryology on transmitters in the C.N.S.

(25) £6,412 for research in the Department of Phsyiology on the chemical energetics of muscle calorimetric studies.

(26) £2,965 for research in the Department of Physiology on the energetics of muscular contraction.

(27) £1,705 for research in the Department of Physiology on the origin of alpha rhythm as tremor of the extra-ocular muscles.

(28) £500 for a study in the Department of Physiology of some problems of foetal and neonatal exchanges in relation to the blood brain barrier.

(29) £8,486 for research in the Department of Physiology and the Department of Pharmacology on neurophysiological correlates of psychological processes and their modifications by drugs.

(30) £22,085 for the Department of Psychology for on-line computer facilities for psychological research.

(31) £500 for the Student Health Association and the Department of Psychiatry, London Hospital, for the delineation and measurement of study difficulties in university students.

(32) £115,790 for research in the Department of Zoology and Comparative Anatomy on immunology of the nervous system.

(33) Research training support grants totalling £7,700.

MEDICAL RESEARCH COUNCIL (CANADA)

$5,000 for the expenses of a visiting scientist in the Department of Anatomy and Embryology.

MERCK AND COMPANY INC.

$2,562.50 for the expenses of a visiting scientist in the Department of Human Genetics and Biometry.

MINISTRY OF AGRICULTURE, FISHERIES, AND FOOD

Research training support grant of £50.

MINISTRY OF AVIATION SUPPLY

(1) £2,322 for research in the Department of Chemical Engineering on particle mixing in gas fluidised beds.

(2) £1,266 for research in the Department of Chemical Engineering on spontaneous ignition of pure hydrocarbons.

(3) £1,571 for research in the Department of Chemistry on olefin activation and polymerisation.

(4) £1,210 and £745 for the Department of Mechanical Engineering for an assessment of the fragility of equipment and any associated effects on packaging techniques.

(5) £4,598 for research in the Department of Photogrammetry and Surveying into the industrial use of photogrammetry as an aid to the measurement of complex shapes.

MINISTRY OF DEFENCE

(1) £574 for research in the Department of Electronic and Electrical Engineering on microwave circuit functions using acoustic surface waves.

(2) £9,122 for research in the Department of Mechanical Engineering into the dynamic responses of ship structures and systems.

(3) £825 for research in the Department of Mechanical Engineering on the optimum control of three interacting servo systems.

MINISTRY OF DEFENCE (AVIATION SUPPLY)

£4,144 and £1,550 for a study in the Department of Mechanical Engineering of the effect of certain foams on flame initiation and propagation.

MINISTRY OF EDUCATION (NORTHERN IRELAND)

Research training support grants totalling £204.

MINISTRY OF PUBLIC BUILDING AND WORKS

£5,000 per annum for five years for the appointment of a Reader in Construction Economics in the School of Environmental Studies in connection with a programme of research on economic and operational aspects of the building process.

MINISTRY OF TECHNOLOGY

(1) £326 for research in the Department of Chemistry on rare earth chelate complexes.

(2) £1,715 for research in the Department of Mechanical Engineering on multiple input control systems for the control of ship motion.

MONSANTO CHEMICALS LIMITED

£1,330 for a postgraduate scholarship in the Department of Chemistry.

THE MULTIPLE SCLEROSIS SOCIETY

£1,310 and £380 for research in the Department of Anatomy and Embryology on the pathogenesis of experimental allergic neuritis and its relationship to clinical neuropathies and multiple sclerosis.

MUSCULAR DYSTROPHY GROUP OF GREAT BRITAIN

£557 for a study in the Department of Biochemistry of the changes in protein synthetic apparatus of muscle tissue.

NATIONAL FUND FOR RESEARCH INTO CRIPPLING DISEASES

£350 for the Department of Human Genetics and Biometry for an analysis of data on births with congenital malformation, still births, and neonatal deaths.

NATIONAL RESEARCH DEVELOPMENT CORPORATION

£4,500 for research in the Department of Chemistry on peptides from bee venom.

NATIONAL SCIENCE FOUNDATION, U.S.A.

$200 for a NATO post-doctoral fellowship supply allowance in the Department of Psychology.

NATURAL ENVIRONMENT RESEARCH COUNCIL

(1) £8,706 for research in the Department of Chemistry on the geological and cosmological significance of radiation-damaged diamond and other minerals.

(2) £2,103 and £1,162 for research in the Department of Civil and Municipal Engineering on the strength and stress-strain behaviour of layered soils.

(3) £4,050 for a study in the Department of Geology of oceanography and geology of selected areas in the Caribbean.

(4) £2,652 for the Department of Geology for high pressure and temperature rheological experiments on geological materials important in tectonics.

(5) £129 for the Department of Geology for palaeomagnetic and mineralogical studies relating to basic intrusions of Ardnamurchan and Freetown.

(6) £102 for the Department of Geology for a geological map of the English Channel.

(7) Research training support grants totalling £4,029.

NORTH ATLANTIC TREATY ORGANISATION

(1) $3,500 for research in the Department of Chemical Engineering on the hydrodynamics of fluidised particles with reference to chemical reactors.

(2) $1,840 for research in the Department of Chemistry on the synthesis and structure of chelate metal-olefin complexes of transition metals.

(3) $1,500 for studies in the Department of Chemistry on d-8 complexes.

NOVA SCOTIA RESEARCH FOUNDATION

$500 for the Department of Geology for research on the Mississippian Windsor evaporites in Nova Scotia.

THE NUFFIELD FOUNDATION

(1) £3,000 for a study of students and staff in the Department of Chemistry.

(2) £1,108 and £464 for studies in the Department of Chemistry on the formation, prevention, and dissolution of crystals occurring pathologically in man.

(3) £750 for a study in the Department of Laws of the history of law relating to accidents.

(4) £525 for a study in the Department of Political Economy of the characteristics of the merger movement in Britain during the last decade.

The Paul Instrument Fund Committee

(1) £10,717 for research in the Department of Electronic and Electrical Engineering on a new technique for wide-band precision impedance measurement.

(2) £9,767 for the Department of Electronic and Electrical Engineering for the construction of a microwave radio refractometer.

The Pilgrim Trust

£5,000 towards the cost of the production of a definitive edition of the works of Jeremy Bentham.

Post Office Contracts Division

£77,138 and £3,763 for a study in the School of Environmental Studies of the effectiveness and impact of future systems of person to person telecommunications.

Mrs Joan Prince and Mrs Yvonne Lovatt Schou

A gift of £1,000 for the Department of Physiology from Mrs Prince and Mrs Schou, daughters of the late Emeritus Professor Sir Charles Lovatt Evans. The gift is being used to establish a fund, to be known as the 'Lovatt Evans Fund', to provide amenities in the Department.

Procter and Gamble Limited

£700 for the Department of Chemical Engineering towards the cost of a Hewlett-Packard 9100A Electronic Calculator.

Max Rayne Foundation

£34,000 towards the cost of alterations in the Department of Zoology and Comparative Anatomy in connection with the Immunology Unit.

Roche Products Limited

£900 and £566 for research in the Department of Pharmacology on the action of psychotropic drugs.

Joseph Rowntree Memorial Trust

(1) £7,875 for a study in the School of Environmental Studies of the relative importance of different factors affecting house purchase decisions of recently married couples.

(2) £16,285 and £988 for research in the Department of Geography on housing and the mobility of labour.

Royal Institute of British Architects

£500 for secretarial assistance in the School of Environmental Studies.

The Royal Society

(1) £6,154.93 for research in the Department of Biophysics on the development and regeneration of neuro-muscular connections.

(2) £4,005 for an investigation in the Department of Botany and Microbiology of the aspects of bacterial cell division.

(3) £2,109.50 for research in the Department of Botany and Microbiology on the regulation of carbon dioxide fixation during photo-synthesis.

(4) £2,248 for research in the Department of Chemistry on heteronuclear magnetic double resonance spectroscopy.

(5) £810 for the Department of Geology towards the cost of a College expedition to eastern Anatolia.

RUSTENBERG PLATINUM MINES LIMITED

£10,350 for research in the Department of Chemistry on the synthesis of the new derivatives of platinum and the chemical reactivity of such platinum complexes with a primary emphasis on the anti-cancer activity of these compounds.

MRS YVONNE LOVATT SCHOU, *see* p. 129

SCIENCE RESEARCH COUNCIL

(1) £6,018 and £177 for the Department of Anatomy and Embryology for scanning electron microscopy of biological tissues.

(2) £8,117 for the Department of Anthropology for sequence studies on primate proteins.

(3) £4,666 for an investigation in the Department of Astronomy on the collapse of interstellar gas clouds.

(4) £498 for equipment in the Department of Astronomy for visual observers of satellites.

(5) £332 for a study in the Department of Astronomy of weak features in the visible spectrum and prediction of the UV spectrum of O-type stars.

(6) £80 for a study in the Department of Astronomy of sharp-interstellar lines and diffuse features.

(7) £11 for the Department of Astronomy for observing time at the Royal Greenwich Observatory.

(8) £3,036 for a study in the Department of Biochemistry of mitochondrial biogenesis by automated techniques.

(9) £2,301 for research in the Department of Biochemistry on the characterisation of nuclear proteins.

(10) £6,882 for research in the Department of Botany and Microbiology on the control of episome replication in salmonella.

(11) £12,814 for research in the Department of Chemical Engineering on the dynamics of porous catalyst systems, poisoning, diffusional, and kinetic studies.

(12) £9,484 for research in the Department of Chemistry on the synthesis of large-ring conjugated systems.

(13) £6,189 and £1,650 for the Department of Chemistry for optical electron microscope studies of photochemical processes in organic crystals.

(14) £6,109 for an investigation in the Department of Chemistry of the structures and activities of aspartate aminotransferases.

(15) £6,006 for an investigation in the Department of Chemistry of the deviations from the additivity principle.

(16) £5,697 for research in the Department of Chemistry on the kinetics of bimolecular homolytic substitution reactions of organo metallic compounds.

(17) £5,606 for research in the Department of Chemistry on the application of nuclear quadrupole resonance to the study of bonding in Pt and Pd complexes.

(18) £4,736 for research in the Department of Chemistry on the biosynthesis of monoterpenes in higher plants.

(19) £4,438 for research in the Department of Chemistry on the transition metal complexes of annulenes and dehydroannulenes.

(20) £4,414 for research in the Department of Chemistry on the synthesis of steroids containing non-benzenoid aromatic systems.

(21) £2,001 for research in the Department of Chemistry on high-resolution molecular electronic spectroscopy.

(22) £815 for research in the Department of Chemistry on the mechanism of hydrolysis of organic phosphates by acid phosphatases.

(23) £794 for research in the Department of Chemistry on the cationic counterpart of the ene-reaction.

(24) £791 for research in the Department of Chemistry on electron spectroscopy and the energy states of ions.

(25) £639 for research in the Department of Chemistry on organometallic chemistry of the early transition elements.

(26) £529 for research in the Department of Chemistry on the stabilisation of organic molecules as transition metal complexes.

(27) £15 for research in the Department of Chemistry on diffuse magnetic neutron scattering in MnF_2.

(28) £18,503 for the Department of Civil and Municipal Engineering for the formulation of a theory of road accident frequency.

(29) £10,564 for the Department of Civil and Municipal Engineering for field studies of flow characteristics in relation to sediment transport and flow resistance.

(30) £9,392 for an investigation in the Department of Civil and Municipal Engineering on dual water supply systems.

(31) £6,000 for a study in the Department of Civil and Municipal Engineering of the hydraulic transportation of solids in pipes.

(32) £3,521 for the Department of Civil and Municipal Engineering for general perturbation studies of structural stability and their application to practical problems.

(33) £137,687 for the Department of Electronic and Electrical Engineering for microwave research.

(34) £33,306 for research in the Department of Electronic and Electrical Engineering on an electronic road network simulator.

(35) £1,391 for the Department of Electronic and Electrical Engineering for an analysis and improvement of incremental stepping motors.

(36) £1,000 for an investigation in the Department of Electronic and Electrical Engineering of the influence of preprocessor parameters on the performance of word classifiers.

(37) £43,064 for the School of Environmental Studies for a study of the building process: the mechanism of response to effective demand.

(38) £31,947 for a study in the School of Environmental Studies of the use of space and facilities by complex organisations.

(39) £78 for a study in the School of Environmental Studies of psychophysical aspects of visual and thermal requirements under tropical conditions.

(40) £2,589 for a study in the Department of Mathematics of singular perturbation methods in control theory.

(41) £156 for research in the Department of Mechanical Engineering on the influence of specimen thickness on random load fatigue crack propagation rates.

(42) £690,000 and £31,775 for the Department of Physics for geophysical and astronomical researches in Space.

(43) £15,000 for the Department of Physics for a balloon programme of infra-red astronomy.

(44) £8,058 for research in the Department of Physics on ground-based infra-red astronomy.

(45) £6,720 for the Department of Physics for curve-crossing studies using differential scattering with capture.

(46) £6,601 for research in the Department of Physics on the excitation of atomic hydrogen to the 2S state by electron impact.

(47) £4,619 for a study in the Department of Physics of inelastic collisions of positrons with molecules.

(48) £4,420 for a study in the Department of Physics of relativistic corrections in atomic structure and atomic collision calculations.

(49) £2,260 for the development in the Department of Physics of an image photon-counting detector system for optical astronomy.

(50) £1,045 for a study in the Department of Physics of neutrino interactions in Gargamelle and related technical analysis problems.

(51) £287 for the Department of Physics for expenses in connection with a visit to the Infra-Red Observatory, University of Minnesota.

(52) £32 for the Department of Physics towards the costs of observatory observation time during an investigation of the medium resolution spectra of NGC 3034 and NGC 4151 in the range 8-13 microns.

(53) £11,412 for the Department of Physics and the Department of Chemistry for an X-ray analysis of biochemically interesting molecules.

(54) £254 for research in the Department of Zoology and Comparative Anatomy on the embryology of anuran amphibia.

(55) Research training support grants totalling £28,917.

Shell International Petroleum Company Limited

£100 for the Department of Geology for sedimentological study of the Great Oolite around Bath.

Social Science Research Council

(1) £15,000 towards the cost of the production of a definitive edition of the collected works of Jeremy Bentham.

(2) £383 for research in the Department of Anthropology on the social determinants of belief studied in an English community of nuns.

(3) £12,182 for the School of Environmental Studies for an evaluation of the urban and regional planning process-development of theory and methodology.

(4) £1,249 for a study in the School of Environmental Studies of changes in students' performance on personality tests during university courses.

(5) £8,800 for a study in the Department of History of the transformations in ancient political and religious organisation, concepts, and values.

(6) £4,996 for an experimental study in the Department of Psychology of the cognitive processes and the educational attainments of socially-handicapped children.

(7) £2,959 for the Department of Statistics for the preparation of a catalogue, calendar and hand list of the archives of Karl Pearson.

(8) Research training support grants totalling £90.

UNITED KINGDOM ATOMIC ENERGY AUTHORITY

(1) £3,600 for a joint fellowship in the Departments of Chemistry and Chemical Engineering.

(2) £1,270 for research in the Department of Electronic and Electrical Engineering on the rapid microwave Q-factor measurement.

(3) £1,300 for a study in the Department of Physics of electron-ion recombination in carbon dioxide.

UNITED STATES AIR FORCE

$5,000 for the Department of Physics for the determination of air density, temperature and winds at high altitude.

UNITED STATES PUBLIC HEALTH SERVICE

(1) $9,775 for studies in the Department of Anatomy and Embryology of CNS cells receiving visceral afferents.

(2) $6,000 for the Department of Biochemistry for computer simulation of metabolic control.

(3) $43,441 for research in the Departments of Pharmacology and Psychology, and in the Department of Psychology, Birkbeck College, on the psychopharmacology of learning, perception and skill.

THE WATES FOUNDATION

£450,000 towards the cost of erecting a building, on the site of the Endsleigh Hotel, to be used for Environmental Studies.

THE WELLCOME FOUNDATION LIMITED

(1) £2,893 for a postgraduate studentship in the Department of Chemistry for research on factors produced by lymphocytes.

(2) £1,900 for the Department of Chemistry for research collaboration on the epidermal growth factor.

THE WELLCOME TRUST

(1) £3,135 and £237.50 for an investigation in the Department of Anatomy and Embryology of synaptic structure by electron microscopy and fluorescence microscopy.

(2) £790 in support of Dr K. E. Webster's research in the Department of Anatomy and Embryology.

(3) £9,189 for the sub-department of the History of Medicine in the Department of Anatomy and Embryology for research on medicine in medieval England.

(4) £7,989 for research in the Department of Animal Genetics on the role of antiteratogens in congenital deformities.

(5) £7,213 for equipment in the Department of Biochemistry for use in connection with an investigation of mammalian RNA polymerase.

(6) £3,100 for the Department of Biochemistry for the purchase of an atomic absorption spectrophotometer for use in research on the transport of magnesium across mammalian cell membranes.

(7) £1,650 and £427,50 for a research fellowship in the Department of Biophysics.

(8) £345 and £626 for a study in the Department of Pharmacology of biochemical evidence for secretion of histamine by exocytosis from the perfused guinea-pig lung.

(9) £500 and £240 for a research fellowship in the Department of Physiology.

(10) £20,000 for the Department of Zoology and Comparative Anatomy towards the provision of animal accommodation in the Immunology Unit.

WHITEHALL FOUNDATION INC.

£8,970 for a study in the Department of Chemistry of substances promoting growth and differentiation in animal cells.

THE RALPH YABLON COMPANY LIMITED

£500 for the Library for the maintenance and expansion of the library of Emeritus Chief Rabbi, Sir Israel Brodie, which was presented to the College in 1968.

The following grant announced in the Report for 1969–70 was reduced during the year 1970–71:

SCIENCE RESEARCH COUNCIL

Grant for researches in the Department of Chemistry in organometallic chemistry, reduced from £52,708 to £34,408, on the departure of Professor J. Lewis and Dr B. F. G. Johnson to Cambridge.

BENEFACTIONS AND DONATIONS TO THE LIBRARY

EXECUTORS OF DR MARION GRACE EGGLETON

A gift of 10 volumes and a portrait of Professor A. V. Hill.

THE HON. SPENCER D. LOCH

A gift of the papers of James Loch (1780–1855). Loch's papers, covering the period 1826–53, deal mainly with early developments within College and with the affairs of the Society for the Diffusion of Useful Knowledge, on whose General Committee Loch served from 1828 to 1844.

MRS MARY MOORMAN

A gift consisting mainly of engagement books of the Ward family, with some private diaries of Thomas Humphry Ward and his daughter Dorothy, and letters from Dorothy's brother, Arnold Sandwith Ward, to other members of the family. The diaries date from 1871 to 1940, and the letters from 1890 to 1915.

EMERITUS PROFESSOR SIR JOHN NEALE

A gift of a volume of manuscript law reports by Timothy Tourneur, dated about 1632.

MRS SONIA ORWELL

A further gift of papers of George Orwell, including the typescript of *Animal Farm* and *Nineteen Eighty-four* and the rejection letters of *Animal Farm* by T. S. Eliot and Jonathan Cape.

Mr J. K. Shah
A further gift of 52 books and pamphlets on law and international relations.

Mr John Townsend
A gift of 50 books for the Celtic collection.

APPENDIX XIV

COLLEGE ACCOUNTS 1970–71

The Balance Sheet and the Income and Expenditure Account for the year will be found on pages 139–41.

BALANCE SHEET

LIABILITIES

The Capital Account increased by £339,777, which is mainly attributable to the completion of the Ramsay Hall extension, for student accommodation.

ASSETS

Freehold and Leasehold Land and Buildings increased by £639,570, including the acquisition shown above and the purchase of the Endsleigh Hotel.

TRUST FUNDS

The College holds endowments in the form of 203 separate trust funds with a total value of £1,347,833. The funds yield a total annual income of £83,000.

INCOME AND EXPENDITURE

The expenditure for the year exceeded income by £23,269, after charging £80,000 which was regarded as an allocation from the accumulated surplus. The balance carried forward on the Income and Expenditure Account was £87,590 (£110,859 in 1969–70).

Income exceeded that for 1969–70 by £934,430, of which £732,805 represented increased grants from the Court of the University. Fees increased by £2,832. Grants for research were £244,528 higher than in the previous year. Selective Employment Tax (wholly recovered) decreased by £19,423.

Expenditure, including allocations to and from Reserves, was £920,064 more than in 1969–70. Of this sum £688,844 was spent on academic departments. Maintenance of Premises cost an additional £157,642.

Income and expenditure under the main classifications in 1970–71 as compared with 1969–70 and with the corresponding year of the previous quinquennium, are shown in the following table.

	1965-66		1969-70		1970-71	
EXPENDITURE	£	%	£	%	£	%
Salaries and Pensions of Teaching Staff. .	1,761,552	38·5	2,391,622	33·4	2,638,547	32·7
Departmental Expenses, including Library	1,052,993	23·0	1,570,471	21·9	1,767,862	21·9
Research Grants . .	757,530	16·5	1,282,623	17·9	1,527,151	18·9
Maintenance of Premises	616,511	13·4	1,045,252	14·6	1,202,894	14·9
Administration . .	261,069	5·7	430,419	6·0	500,622	6·2
Selective Employment Tax	—	—	268,418	3·8	248,995	3·1
Other	131,186	2·9	168,363	2·4	191,161	2·3
	£4,580,841	100·0	£7,157,168	100·0	£8,077,232	100·0
INCOME						
Endowments . .	62,198	1·4	82,951	1·2	79,493	1·0
Grants	3,330,661	72·8	4,795,759	67·4	5,528,564	68·6
Donations	52,354	1·1	153,038	2·1	129,994	1·6
Fees	268,316	5·9	400,056	5·6	402,888	5·0
Grants for Research	757,530	16·5	1,282,623	18·0	1,527,151	19·0
Research Training Support Grants . .	36,849	0·8	43,570	0·6	40,990	0·5
Selective Employment Tax	—	—	268,418	3·8	248,995	3·1
Other	67,426	1·5	93,118	1·3	95,888	1·2
	£4,575,334	100·0	£7,119,533	100·0	£8,053,963	100·0

EXTRA-BUDGETARY ACTIVITIES

The College administers the finances of many research projects supported from outside sources. 457 were being pursued actively at 31 July 1971. Income and expenditure rose from £1,282,623 in 1969–70 to £1,527,151 in 1970–71.

CAPITAL GRANTS

Capital grants made during the year 1970–71 were as follows:	£
Provision of staff rooms, workshop, and studio etc. for School of Environmental Studies: Furniture	1,840
Alterations associated with upgrading of IBM 360/H65 Computer:	
Building work	9,262
Furniture	707

Conversion of heating system at 5-6 Colosseum Terrace:	
Building work	549
Conversion of heating system at 27, 31-44 Cartwright Gardens:	
Building work	7,000
Engineering Building, Stage IV: Building work	1,937
Conversion of Weldon Theatre for teaching purposes:	
Building work	17,796
Student Health Centre: Furniture	6,142
Chemistry Building, Stage I: Furniture	5,500
Alterations in Henry Morley Building for Library Studies:	
Building work	1,427
Furniture	480
Department of Physics, Mullard Space Science Laboratory:	
Building work	1,993
Furniture	760
Alterations in Department of Biochemistry:	
Building work	1,207
Furniture	160
Alterations in Old Chemistry Building: Building work	79,673
Adaptations in Department of Physiology:	
Building work	6,800
Furniture	4,583
	£147,816

SCHOLARSHIPS AND PRIZES

Expenditure amounted to £36,308. Awards were made as under:

	Undergraduate	*Postgraduate*
	£	£
From Endowments	6,966	4,976
„ Donations	—	15,134
„ General Income	4,310	4,922
	£11,276	£25,032

UNIVERSITY COLLEGE LONDON
BALANCE SHEET AS AT 31 JULY 1971

31–7–70 £		£
14,761,461	CAPITAL ACCOUNT	15,101,238
25,445	REDEMPTION FUNDS	27,072
69,875	LOANS	302,605
14,856,781		15,430,915
953,104	RESERVES AND AMOUNTS SET ASIDE	1,252,054
604,715	EARMARKED FUNDS	870,615
600,596	CURRENT LIABILITIES	580,775
17,015,196		18,134,359
1,327,257	TRUST FUNDS	1,347,833

NOTE

Freehold and Leasehold Land and Buildings

(a) Freehold and leasehold land and buildings as stated in the accounts does not include fixtures, furniture and equipment. The cost of these assets is written out of the accounts on purchase or on completion of a Project against the corresponding grants or other monies received which are not therefore included in Capital Account.

(b) Freehold land and buildings are stated at valuation made in 1959 on the basis of the then current land values and building costs; additions since are stated at cost, which is estimated by the College authorities on the basis of the proportion of completed projects applicable to land and buildings.

£18,342,453		£19,482,192

31–7–70 £		£
14,545,838	FREEHOLD LAND AND BUILDINGS—See Note below	15,195,020
434,624	LEASEHOLD LAND AND BUILDINGS	425,012
14,980,462		15,620,032
81,236	CAPITAL AND OTHER WORKS IN PROGRESS *less* capital grants and other capital receipts	12,773
408,112	INVESTMENTS (*Market Value at 31 July 1971, £594,085; 31 July 1970, £377,722*)	570,100
952,126	EXPENDITURE RECOVERABLE FROM FUTURE GRANTS	1,140,586
593,260	CURRENT ASSETS	790,868
17,015,196		18,134,359
1,327,257	TRUST FUNDS	1,347,833

£18,342,453		£19,482,192

INCOME AND EXPENDITURE ACCOUNT FOR YEAR ENDED 31 JULY 1971

EXPENDITURE

1969–70 £		£	£
	ADMINISTRATION		
330,567	Salaries	382,941	
90,731	Advertising, Printing, Stationery, Postage and Telephone	99,246	
9,121	Other Expenses (including Professional Fees)	18,435	
(430,419)			500,622
	ACADEMIC DEPARTMENTS		
2,359,097	Salaries of Teaching Staff	2,606,982	
812,061	Departmental Wages: Technical Staff	850,484	
148,025	Secretarial Staff	203,579	
434,089	Departmental and Laboratory Maintenance	413,601	
1,282,623	Research Expenditure covered by grants on Research Contracts (contra opposite)	1,527,151	
7,178	Other Expenditure	9,085	
(5,043,073)			5,610,882
	ACADEMIC SERVICES		
107,792	Libraries: Salaries	126,923	
83,248	General Expenditure	89,165	
		216,088	
5,632	Central Photographic Service	6,358	
—	Audio Visual Aids	117	
(196,672)			222,563
	MAINTENANCE OF PREMISES		
293,546	Rates	272,319	
13,358	Insurance	12,245	
	Rents and other payments for use of buildings:		
	Halls of Residence	10,906	
58,673	Other Buildings	50,659	
		61,565	
177,182	Heat, Light, Water and Power	199,927	
349,320	Repairs and Maintenance of Buildings including amounts sets aside for long-term maintenance	418,553	
84,340	Wages of Porters and Attendants	93,740	
10,766	Other Expenses	15,589	
(987,185)			1,073,938
	GENERAL EDUCATIONAL		
1,496	Examinations	1,112	
45,900	Scholarships and Prizes	36,308	
1,032	Public Lectures	1,205	
4,500	Staff Attendance at Conferences	4,500	
—	Student Vacation Grants	1,613	
1,500	Miscellaneous	1,500	
(54,428)			46,238

INCOME

1969–70 £		£	£
	ENDOWMENTS		
(82,951)	Income of Trust Funds appropriated for purposes specified by Trust against expenditure included opposite)		79,493
	DONATIONS AND SUBSCRIPTIONS: Appropriated for:		
2,640	Libraries	429	
26,464	Scholarships and Bursaries	15,134	
80,936	Salaries and Superannuation	85,051	
42,998	Departmental and Laboratory Maintenance	29,380	
(153,038)			129,994
	GRANTS FROM UNIVERSITY COURT		
4,094,000	General		4,832,700
227,200	Earmarked: Academic Salary Revision 1969 Scheme	—	
—	Academic Salary Revision 1970 Scheme	214,907	
102,105	Former Research Councils	116,455	
293,546	Rates	272,319	
1,110	Hayter Committee	2,134	
75,000	Supplementary Maintenance Grant	80,000	
2,798	Parry	5,949	
—	Student Vacation Grants	4,100	
(701,759)			695,864
43,570	**RESEARCH COUNCIL TRAINING SUPPORT GRANTS**		40,990
400,056	**FEES**		402,888
1,282,623	**GRANTS FOR RESEARCH**, including research contracts (contra opposite)		1,527,151
25,001	**CONTRIBUTIONS FOR SERVICES RENDERED**		29,517
17,772	**COLLEGE PROPERTIES**—Rents received		19,729
	OTHER ITEMS		
9,447	Special Funds Appropriation	10,844	
25,467	Interest on Deposits	24,890	
15,431	Miscellaneous	10,908	
			46,642
268,418	**SELECTIVE EMPLOYMENT TAX** (contra opposite)		248,995

	Student Facilities and Amenities		
	Grant to Students Union (including Collegiate Theatre)	58,751	
56,573	Salaries: Wardens of Halls of Residence	9,028	
10,574	Student Health Service	12,234	
8,286	Students' Purposes Fund	2,244	
4,053	Crabb Robinson Fund	240	
247	Ealing Hall Fund	402	
265	Central Admissions Scheme	5,396	
5,188	Miscellaneous	1,808	
299	Careers Office	7,509	
5,743			97,612
(91,228)			
	Miscellaneous		
	Staff Pensions	31,565	
35,525	Grants from Benevolent Funds	2,734	
3,228	Interest on Overdrafts, etc.	9,592	
4,550	Sundries	17,959	
8,362	Refectory: College Subvention	1,883	
2,567	Selective Employment Tax (contra opposite)	248,995	
268,418			312,728
(319,650)			
	Capital Expenditure met from Income		
	Holmbury House	1,827	
2,000	R.T.B. House	—	
2,000	Wolfson House	10,661	
—	Miscellaneous	168	
—			12,656
(4,000)			
	Allocation to (from) Reserves at 31 July 1971		
	Equipment Reserve	—	
40,000	College Fund	40,000	
20,000	Shenley Pavilion	25,000	
—	Buildings	15,000	
—	Revenue Grants:		
	Departmental Maintenance	54,120	
(7,757)	Library	3,621	
(1,925)	Repairs and Maintenance of Buildings	20,807	
19,953	Petty Works	66,294	
18,192	Student Vacation Grants	2,487	
—			147,329
(28,463)			
	Former Research Councils (earmarked funds)	9,575	9,575
8,448			
£7,223,566			£8,114,143
	Excess of Expenditure over Income for the year, after allocations (net) to Reserves of £199,993		23,269
37,635	Balance, 31 July 1971, carried to Balance Sheet		87,590
110,859			
£148,494			£110,859

	Allocations from Reserve at 1 August 1970		
	Revenue Grants:		
7,913	Departmental Maintenance	(7,757)	
5,602	Library General Expenditure	(1,925)	
19,880	Repairs and Maintenance	19,953	
20,198	Petty Works	18,192	
			28,463
12,805	Former Research Councils Grant		8,448
7,185,931			8,090,874
	Excess of Expenditure over Income for the Year, after allocations (net) to Reserves of		
37,635	£199,993		23,269
7,223,566			£8,114,143
148,494	Balance as at 1 August 1970		110,859
£148,494			£110,859

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